The background of the book cover features a stylized, high-contrast illustration. On the right side, a tall, lattice-structured power line tower extends vertically. Several diagonal lines representing power lines stretch from the tower towards the left. In the upper center, there is a circular shape, possibly representing the sun or moon, with a textured, grainy appearance. The overall style is reminiscent of mid-20th-century graphic design.

The Conservation Fight

**FROM THEODORE ROOSEVELT TO
THE TENNESSEE VALLEY AUTHORITY**

By Judson King

Public Affairs Press Washington, D. C.

"Here is history, authentic history, of a crucial period in American life and politics that has all the challenge and charm of drama, written by a leading actor in the drama. Here is the intimate story, by a participant, of how TVA . . . came into being.

"Judson King knew all the actors in the mighty TVA drama which started with the conservation movement in Teddy Roosevelt's day. . . His interest in popular government led him ultimately to the directorship of the National Popular Government League, established under the leadership of George Norris and Gifford Pinchot. One of the earliest interests of the League was establishment of initiative and referendum in each of the states.

"Deeply concerned with popular control of America's natural resources, Judson King saw the potentialities for abundant, cheap hydro-electric power, combined with flood control, to serve citizens free from exploitation. The waste of waters of our swift rivers rushing to the sea without passing through turbines to generate low-cost electricity for our people—power unused in this age of science—was unendurable to him. Every fibre within him rebelled against such injustice to the public interest, whether it expressed itself in unsavory political practice, locally or nationally, or in some form of restrictive monopoly.

"In this book, Judson King brings back to life for a new generation many episodes in the conservation movement and the fight for TVA, including the Federal Trade Commission inquiry into the nefarious practices of the private utilities which brought reforms in the 1930's. . . He pays his respects to the Corps of Army Engineers, too, and tells us the story of their opposition to the high dam development which became the core of cheap electric power. . . .

"More than a history of the birth pains of TVA, important as that is, this book is a history of a free people's fight to maintain control of one of their own natural resources, the waters of a great river system, to assure themselves and their posterity a better life.

"Built by one generation, TVA and the conservation principles it represents must be cherished and preserved by another. Judson King has shown the way."—BENTON J. STONG in the Foreword.

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The Conservation Fight

A recent photograph of Judson King

The Conservation Fight

FROM THEODORE ROOSEVELT TO THE
TENNESSEE VALLEY AUTHORITY

By JUDSON KING

WITH AN INTRODUCTION BY CLYDE ELLIS
AND A FOREWORD BY BENTON J. STONG

Public Affairs Press, Washington, D. C.

TO MY WIFE, BERTHA HALE KING,
*without whose aid in many ways this
book could not have been written.*

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FOREWORD

Here is history, authentic history, of a crucial period in American life and politics that has all the challenge and charm of drama, written by a leading actor in the drama. Here is the intimate story, by a participant, of how TVA, acclaimed throughout the civilized world came into being as a product of the conservation movement.

Judson King knew all the actors in the mighty TVA drama which started with the conservation movement in Teddy Roosevelt's day. The greatest star, of course, was Senator George Norris of Nebraska. He fought on every front, held the line in the Senate though it bulged badly at times, rallied his forces constantly, overcame vetoes by Presidents Coolidge and Hoover; fought on and on to victory, which came when the Great Depression weakened the opposition and President Franklin D. Roosevelt was enabled to put the final stamp of approval on this magnificent enterprise. Throughout this long and titanic struggle to save the waters of the great Tennessee River, Judson King fought staunchly at the side of Senator Norris.

For many years, Judson and his wife, Bertha Hale King, drove by Senator Norris' home on critical days, took him to his office and then proceeded to their own office in downtown Washington, often taking the Senator home again in the evening. The strategy and many of the specific steps in the long fight to keep Muscle Shoals for the people and for full development of the Tennessee River basin were planned during these trips. Judson has been described as "the man who passed the ammunition" which Norris and many of his colleagues fired in the long struggle. There are glimpses of Judson's personal participation in the fight in this book. But they are only glimpses. Actually, he was a daily participant whose concentration, energy and zeal attracted and inspired others to be active in his great cause.

Judson was born in Waterford, Pennsylvania in 1872 and was left an orphan at 6 years of age. He was placed on a farm to be reared, leaving at age 17 to seek an education. After attending a sectarian school in his home state, he went to the University of Michigan. He founded the *Denison* (Texas) *Morning Sun* in 1902. Three years later he went to Toledo, Ohio, to work with the vigorous reform Mayor "Golden Rule" Jones and his successor, Brand Whitlock, the famed lawyer-novelist-reformer and noted wartime ambassador to Belgium.

Judson King's interest in popular government led him to make sev-

eral trips abroad and ultimately to the directorship of the National Popular Government League, established by "The Committee of Fifty" in 1913 under the leadership of George Norris and Gifford Pinchot. One of the earliest interests of the League was establishment of initiative and referendum in each of the states. Judson and his wife traveled throughout the nation in their car studying the status, past use and usefulness of "I & R" to assure government responsive to and controlled by the wishes of the people.

Deeply concerned with popular control of America's natural resources, Judson King saw the potentialities for abundant, cheap hydro-electric power, combined with flood control, to serve citizens free from exploitation. The waste of waters of our swift rivers rushing to the sea without passing through turbines to generate low-cost electricity for our people—power unused in this age of science—was unendurable to him. Every fibre within him rebelled against such injustice to the public interest, whether it expressed itself in unsavory political practice, locally or nationally, or in some form of restrictive monopoly.

A distinguished economist and teacher, Dr. Horace Gray of the University of Illinois, said of Judson King:

"Viewed from the vantage point of this giddy, superficial, nihilistic modern age, Judson was cast in an ancient and heroic mould. He was a giant among pigmies, a lion set down among rabbits, an honest man among knaves, a just man in a world of greed, cruelty, and cynical injustice, an idealist in an age of gross materialism, a lover of man and nature as against all who would destroy both, a prophet among the deaf and blind, a true democrat confronting a world which pays lip service to democracy but secretly craves and worships power. When I recall his sterling qualities of mind and character, I unavoidably liken him to the saints and heroes of olden times whose memory and deeds we honor because they taught us by example what we ourselves might be if we only dared be great.

"Judson was the last of a notable company of social planners and reformers who in his generation strove to create the liberal, democratic society of our national dreams. His successes leave us a rich heritage; his failures challenge us to greater effort. One is tempted to say, 'We shall not see his like again'; but we dare not say this lest future generations condemn us as cowards and weaklings. We must produce new Judson Kings in this country if we are to survive as a free people. This will be difficult, for men of such grace and character are indeed rare, but with the memory of his achievement before us it will not be impossible. That, I trust, will be his earthly immortality."

In this book, Judson King brings back to life for a new generation many episodes in the conservation movement and the fight for TVA, including the Federal Trade Commission inquiry into the nefarious practices of the private utilities which brought reforms in the 1930's. He reviews the bold attempt by the private utilities to "brainwash" American youth and its teachers, from grade school through our colleges and universities, naming professors who were secretly subsidized by private utilities. We learn here of a part the author himself played in this exposure, and of how quickly leading college professors, carefully indoctrinated by private utility propaganda, ran to cover following his face-to-face attack. He pays his respects to the Corps of Army Engineers, too, and tells us the story of their opposition to the high dam development which became the core of cheap electric power.

This work is timely and valuable because the public memory is short. An attempt was made recently to scuttle TVA by trying to drive through the discredited Dixon-Yates contract. This was a private utility-inspired effort, through another hostile Administration, to undo twenty-five years of constructive achievement and ultimately to destroy TVA. The agency is still being harassed by obstruction of its efforts to expand its power facilities to meet the Valley's needs. Judson King has, in this book, extended his services to his clientele beyond his own life span by leaving them a refresher course on the great significance of TVA, the opposition to it, and the continuing need to defend it.

Judson King never needed his courage and concentration more than in the final years of his life when he fought against time and illness to complete this book. Carefully conserving his strength, he stayed in bed until noon each day, dictating notes and manuscript to Mrs. King and her sister, Mable H. Barnes. After lunch and a nap, he would revise and edit until late in the night.

In the end, Judson King won. Two weeks before his death on July 4, 1958, in his eighty-sixth year, he laid down his pen and said: "This completes the last chapter. I shall write no more."

More than a history of the birth pains of TVA, important as that is, this book is a history of a free people's fight to maintain control of one of their own natural resources, the waters of a great river system, to assure themselves and their posterity a better life.

Built by one generation, TVA and the conservation principles it represents must be cherished and preserved by another. Judson King has shown the way.

BENTON J. STONG

Washington, D. C.

INTRODUCTION

"What Is Past Is Prologue" reads the inscription on a statue in front of the National Archives building in our nation's capital. Thus it emphasizes the present and the future.

This book is a significant study of the long struggle, stretching over nearly two generations, to secure our country's precious navigable water resources—which are Federal property under the Constitution—and to establish water power policies which protect the public's interests. It is significant because that struggle, in principle and in practice, is continuing today and probably will continue for decades, with the same selfish arguments for private-profit exploitation of our rivers and the same self-justification for a "public be damned" attitude toward the American people as a whole.

It is a significant study, too, because we are now in the genesis of another struggle over a new kind of public resource—atomic energy for peaceful uses, brought about only because the Federal government has created and the taxpayers have paid for this vast new resource.

Moreover, this book is of great significance to us who are interested in seeing that rural people and their cooperatively organized non-profit rural electric systems and rural power districts are properly permitted to share in the use of hydro and atomic power developed at the lowest possible cost.* To us, nothing could demonstrate that the "Past is Prologue" better than a ruling of the Comptroller General of the United States in this year of 1958. For that ruling is merely a reiteration of the arguments of the special interests which have continuously opposed a rural electrification program for the United States throughout the 23 years of its existence, and which have actively opposed TVA and all other Federal hydro-electric power development over a still longer period.

The investor-speculator owned and controlled power monopolies argue simply that, regardless of the public's needs, it is "socialistic" and "unconstitutional" for government to participate in any way in

* TVA and the other Federal hydro-electric power projects do not retail electricity but sell it wholesale to rural electric cooperatives, public power districts, municipally owned electric systems, large power consuming industries, commercial power companies and state and Federal agencies.

the electric power industry, so long as anyone from that industry has any desire to exercise his monopolistic "rights"—and regardless of the cost to the public. They apply this as well to the rural electrification program as to Federal wholesale power development. Indeed they have fairly well succeeded in propagandizing the man on the street into believing that the profit public service companies are free enterprise and that the non-profit electric co-ops are not, whereas just the opposite is true.†

In this study, the argument that government cannot legally convert the energy of its falling water into electric energy takes a variety of forms. In the beginning, the fledgling electric industries resisted the idea that the Federal government should have any jurisdiction over the conversion of navigable river water power into electric power. Regardless of the waste and uneconomical use of our water resources, they insisted that the riparian rights of the owners of property adjoining our water resources were paramount to any public interests in those resources.

And today, the profit segment of the electric power industry maintains that atomic energy, as a source of power, should be left to commercial power companies, despite the billions the American taxpayers have invested in research and development of this new resource, and despite the fact that some 20% of power generation, transmission and distribution business is carried on by public and cooperative agencies. They have just about had their way during the

† While monopolies in general have been declared by the Sherman Anti-Trust Act and by other laws to be un-American and illegal, the electric power monopolies have been legalized on the ground that they are "natural" monopolies, that to permit them to compete along the same streets would be a wasteful nuisance, and on the ground that since they perform an essential public service they are in effect agencies of the state endowed with certain powers of state such as eminent domain and the right to occupy the streets and public roads—and on the further assumption that they can be effectively regulated.

As Dr. Herman Trachsel says bluntly in his book *Public Utility Regulation*: "When dealing with the problems of public utility regulation it is essential to recognize the fundamental difference between a public utility and a private business. The public character of the business conducted by the utilities and the privileges under which they operate combine to emphasize the fact that such business might well be performed by the state itself. Those engaged in furnishing public utility services might well be considered as agents performing a function for the state."

Cooperatives, on the other hand, are held to be but an extension of the individual members; hence an instrument of free enterprise.

13 years since the end of World War II, but their approach has failed. We are faced with the danger that use of our atomic resources will be delayed for decades, as was comprehensive development of our water power resources, because of the same selfish motives. Already, Russia and England are far ahead of the U.S. in atomic power development.

We are also hearing today an echoing cry that a new "partnership" concept provides the answer in developing millions of kilowatts of rich, low cost hydro-electric resources remaining untapped in our rivers. This "partnership" idea is nothing but a discredited, threadbare scheme concocted by the opponents of TVA and other Federal power developments, as Mr. King reveals in this book.

TVA is an important landmark in the struggle of the American people to prevent exploitation and waste of their God-given water resources. It still is admired all over the world as a symbol of the public benefits which can be realized from wisely comprehensive development of our rivers. It is a model which may prove to be the salvation of underdeveloped countries in the Free World orbit, which are the easiest targets for aggressive Communism. While President Eisenhower has openly referred to TVA as "creeping socialism," his Administration has sponsored and underwritten the idea for other countries. But, as this study shows, public education and courageous leadership—and a long time of it—are needed to bring this about, even in the most democratic of nations.

I can think of no greater tragedy than for the United States to turn over TVA to the private power interests, which are still propagandizing for that reactionary step just as they unsuccessfully propagandized the American public for a generation to give them the Muscle Shoals site whose development became the first unit of the TVA system. This is what those who control the profit segment of the electric power industry sought to do through the process of the now-discredited Dixon-Yates Deal. This would be evidence to the world that America and its people are truly the victims of monopolistic interests hell-bent to return the world to the days of feudalism. It would be a last step toward complete private power monopoly, the antithesis of the hopes and aspirations which we have held up as our economic strength to unfortunate peoples of other lands.

At home, TVA exists as a living, dynamic symbol of government, responsive to needs of its local people, providing an economic stimulus to people, industry, and labor and for their homes. Its power facilities are completely paid for, and more, by the power users. (Over half of TVA's wholesale power is purchased by Federal defense agencies.)

If there has ever been a real "partnership" between government and the people, it has been the organization and accomplishments of TVA. For the first time in the history of Federal legislation, Congress accepted in TVA the unity of nature and developed all the resources of a great river basin for the benefit of all the people. Besides vastly increasing the availability and lowering the cost of electric power for both private and public use, it has provided navigational achievements, flood control, fertilizer development and soil conservation, recreation and wildlife management. But the most important contribution of TVA to the nation is the electric rate yardstick it set up. The irrefutable fact is that the American consumer has been protected more by the example of TVA's rates than he has by various forms of utility regulation which have been attempted. TVA is the most influential single factor in keeping power monopoly rates within tolerable limits, largely because the Federal Power Commission and the state regulatory commission controls generally have failed. Indeed, it could have been predicted they would fail, because of the great scope and complexity of power monopolies, and the fact that "An ounce of competition can be worth a pound of regulation."

Of course, privately owned public service electric power interests hate TVA because it provides this yardstick—a form of institutional competition by example—against which the people in all the states can measure excessive rates, standards of service, and monopolistic practices. TVA stands as a perpetual challenge to ingenuity and good management of the utilities. It is an argument that cannot be answered, and consequently they would destroy it. They have not ceased the attacks they began when Muscle Shoals was first recognized as a valuable power site, and they will never cease their attacks. This generation and the next must stand mobilized and alert, not only to preserve TVA and REA and all that they symbolize, but also to continue comprehensive, economic use of its resources.

This cannot be done by defensive action alone, for the profit power companies operate cost-plus and therefore have everything to gain and nothing to lose in their persistent war of attrition. Instead, the friends of the Federal wholesale and rural electrification programs must move to reform the privately owned electric power monopoly, which generates and distributes about 80% of the country's power supply. Suggested steps in this direction would include abolishing all holding companies (principally devices for circumventing the anti-trust laws and avoiding effective regulation); making all major transmission lines common carriers, like the pipelines; and prohibiting the

public service electric companies from taxing the ratepayers for the fabulous funds they spend on propaganda-type advertising, front organization contributions, lobbying and political campaigns.

The estimated average flood control benefits of TVA alone now amount to \$11-million annually. Since completion of Norris Dam, 29 floods occurred which, if unregulated, would have reached flood stage at Chattanooga, Tennessee, for instance. All were reduced or completely controlled. This included the major 1957 flood in January and February, during which the damages averted by TVA at Chattanooga alone totalled \$120-million. Yet, the operation of TVA for the comprehensive purposes, which include flood control, would be subordinated to the exploitation of power alone, if it were turned over to the privately owned utilities.

For 25 years now, TVA and the people of that region have engaged in a job of demonstration. New types of fertilization have been developed at Muscle Shoals and farmers all over the country have demonstrated their use in actual farming operations. Every process and every invention developed by TVA has been made available to the private fertilizer industry as well as to agricultural experts and to organizations of farmers. As a result of new ideas developed in TVA, farmers all over the United States are getting more and better plant food at lower cost in every ton of fertilizer they buy today, and the soil's fertility is enhanced for the future. Farmers all over the world are benefiting more and more by the examples.

But what of the future if TVA is divided piece-meal, as the profit-type power companies want it? All the American people would be the victims.

These non-power features of TVA operations, of course, are not the real target of TVA's critics. It is the role of TVA as a wholesale power supplier, and as a yardstick for other suppliers, that is the real target. But that is only part of the target. The whole is the Federal government's participation in hydro-electric resource development everywhere. TVA power created a new era in the seven-state region of the Tennessee Valley. It provided fertile ground for new industries and improvement. It has made possible the extension of economic electric service to homes, farms, and rural establishments on an unrivaled scale. It supplies wholesale power to the 51 electric cooperatives in the seven-state TVA area—to more than 500,000 rural families.

The average home use of electricity in the TVA area reached 7,084 kwh annually in 1958. The national average for home use of electricity over the same period was approximately 3,260 kwh, less than

half the amount TVA residents could afford, despite the fact that their income per capita is still below the national average. On the basis of recent published forecasts, the customers of the nation's electric industry do not expect to reach the present level of use in the TVA region until about 1968.

The same picture exists in the Pacific Northwest, where the public can afford to use much more electricity because of the Bonneville power system, and the Northwest power pool—an example of how private and public power can integrate and mutually prosper together.

Another of the favorite targets of the detractors of TVA is taxes. "Make TVA pay state and local taxes" was one of the early power company battle cries. Yet, as a member of the House of Representatives I sat in shocked amazement when the opponents of TVA voted "No" and the friends voted "Aye" on the bill to do just that. They did not want to make TVA more acceptable. The bill passed and now the payments in lieu of taxes made by TVA to local governments amount to 5% of gross sales of power, excluding sales made to Federal agencies. Although public utilities and other business groups often charge that TVA fails to carry a fair tax weight, TVA is—and has been for years—the largest single taxpayer in the state of Tennessee. In 1959 it will make payments of almost \$14 million to the 7 states, 137 counties, and countless municipalities in the TVA area.

If there is any difference in taxation between Federal enterprises, such as TVA, and private power, it lies principally in the profits the private utilities extract from the consumers. For it is the consumer, not the utility, who pays for the extraordinary right of the utility to have a monopoly in serving the public for profits.

Also, for 23 years the profit power interests screamed that Congress should stop appropriating what were in effect loan funds for TVA's normal vertical expansion; that TVA should do its own financing. Yet when a TVA self-financing bill that had passed the Senate was about to be voted out of the House Public Works Committee in 1958 an unprecedented number of power company presidents from all over the United States and their big business allies appeared against it.

If for nothing else, however, the rural people of all America are indebted to the men and women whose deeds are recalled in the pages of this book for the cooperative rural electrification program. Co-operative rural electrification, was born in the back of a little store in Corinth, Mississippi. There the local citizenry, cooperating with TVA officials and inspired by TVA's example of partnership with the people, launched cooperative rural electrification on a wide scale.

Thus TVA inaugurated the first program of lending funds to co-operatively organized groups for the purpose of extending the distribution of electric service into rural areas not considered sufficiently profitable by profit-motivated utilities. It was not until a year later that President Roosevelt established REA by executive order, and not until a year after that that Congress passed the REA Act. From that TVA genesis sprang the great cooperative rural electrification program now serving 15-million people—men, women, and children—from over a million miles of lines which these people own themselves.

The leaders of the rural and municipally owned electric power systems may appreciate more than most other groups the tremendous struggles recounted in these pages. For they faced the same struggle, the same foes, the same arguments. And they are helping to carry on the struggle, for the success of their consumer-owned electric power enterprises has created the same hate that TVA is shown by the same monopolistic foes. Small though they may be, power companies are just as anxious to take them over, as they did TVA, and are attempting it.

This book is a valuable historical document which no one interested in the cause should be without. Only Jud could have written it.

CLYDE ELLIS

Executive Director of the
National Rural Electric Cooperative Association

PREFACE

Several years ago the late Dr. Robert M. Hunter, professor of law at Ohio State University, brought to my study a professor of utility economics in one of our great eastern universities, who joined him in urging me to write this book. They said in substance:

"Several books have been published describing the physical structure of TVA or dealing with the problems of management involved, but there is no volume in existence which gives any adequate or realistic history of the long conflict which resulted in its creation.

"As teachers we are in need of such a volume succinctly covering the high points for our own use and for our students. The source material is in thousands of documents, or in no documents at all. You are the man to write this history because you had an active part in making it, know many things not in the record, and can bring it alive. We hope you will undertake it."

The idea was not new. I had often needed such a volume myself. But the power "conflict" was far older than the public or even many authors seemed to know. My own active acquaintance with the aims and political tactics of the electric and gas industries had begun in 1905 as editor of the official organ of the "independent" political movement in Toledo, Ohio, and member of the administration of Mayor Brand Whitlock.

In 1921 the fight over the disposition of the government nitrate project at Muscle Shoals came to a showdown. The National Popular Government League, of which I was managing director, was one of the first to support Senator Norris and the group he led in the fight for public ownership and operation, a fight which continued 12 years until the TVA Act was passed. Ever since many officers and leaders of farm, labor and other liberal organizations, members of Congress, federal and state administrators, investigators, newsmen, authors, thesis writers, and others, had come to my office in search of information they could not find elsewhere on the subject. Often I could help them, often not.

Yes, such a volume was needed, but I hesitated because I would have to steal time from other duties and work at it intermittently. However, the undertaking lured me and with encouragement from several others I began. At the start I was fully determined to keep myself out of the story, but friends insisted that I include incidents

of my own part in the warfare. Finally I yielded and I trust readers will find such incidents worthy of inclusion.

Since the purpose of a preface is to clear the readers' minds for what is to follow, permit me to point out a few basic considerations.

First, the basic concepts coordinated in TVA were developed by conservationists prior to 1909. To get a comprehensive background we must go back to 1897 when the first bill to utilize Muscle Shoals for power production by a private company was introduced in Congress. The scientists and statesmen who founded the conservation movement were deeply concerned with the welfare of their own and future generations. They challenged *laissez faire* and advocated federal control, supplemented by state control. They sought to halt the frightful waste of all natural resources and thwart private monopoly in their utilization. They proposed to nail down in perpetual national ownership all sites in navigable river systems which had not already passed to private enterprise, usually as free gifts. They proposed to develop river systems from source to mouth by unified multi-purpose projects, managed by independent commissions.

President Theodore Roosevelt launched the conservation movement as a major political issue a half century ago. Yet, in 1958, when the centennial of his birth and his famous White House Conference of 1908 are being celebrated, a propaganda campaign of immense magnitude is afoot to stand our people on their intellectual heads and lead them to believe that TVAs are un-American, of "alien" vintage, un-businesslike, socially immoral, and even atheistic.

The second basic point to keep in mind is that comprehensive unified projects like TVA are necessarily *national* not merely *local* enterprises; that since they include navigation, flood control, and many other things besides hydroelectric power, and embrace several states they are, like all river and harbor improvements, devoted to the general welfare, and like them are financed by all taxpayers from the Atlantic to the Pacific. Only the electric power divisions must be self-sustaining and paid for by the sale of the power they produce. It is amortized investment, not "spending." All TVA dams carry the inscription: "Built for the People of the United States."

The third fundamental fact which even statesmen ignore is that *water runs down hill*. Hence, wee rivulets make tributaries which feed rivers, which become the architects of valleys and create nature's engineering units for multi-purpose mastery of water in utter disregard of municipal, county and state boundary lines.

The fourth fundamental is that private operators of public utilities are not engaged in "free enterprise," although they insist they are. They operate under franchises granted by government; they are legally simply agents or hired hands performing a public service. When it is realized that they usually get monopoly rights and are guaranteed a minimum return or profit, neither of which "free" business men enjoy, the absurdity of spokesmen for billion-dollar utility corporations asking corner grocery men if they want the government to compete with them becomes apparent.

There is also a serious international aspect to the effort to undermine TVA and REA. To gain friends and maintain American leadership in world affairs we are spending billions of dollars of public and private funds to convince foreign peoples—in Asia and Africa especially—that our economy is a way of life to emulate. Several countries, following our example, are constructing or planning TVAs to bolster their economies and improve the lot of the common people, including dirt-cheap electricity for the home and farm as well as the factory; *and in some cases with our financial aid!*

What is the effect upon the confidence of these millions and their governments in our democratic pretensions when they witness the spectacle of our federal government openly and secretly teaming up with selfish private interests to undercut and destroy projects they so much admire and desire?

In writing this book I have been more and more impressed with the bi-partisan, or more truly, the non-partisan character of the conservation movement and its results. In vain may party platforms or orators claim exclusive credit. Analysis of the votes in Congress reveals that the progressives in neither the Republican party nor Democratic party could, as a rule, have succeeded without the votes of progressives in the other.

When I began this final paragraph I made a list of those to whom I was indebted for supplying data, correcting mistakes, making fruitful suggestions and other assistance. When the number passed 30 I stopped. It included historians, political and social scientists, members of Congress, engineers, attorneys, farm and labor leaders, experts of the TVA staff, newsmen, men and women in government and in private life. To select a few would be unfair so I make grateful acknowledgment to them all without attempt to use names.

JUDSON KING

ACKNOWLEDGMENTS

The effort and support of many loyal friends of Judson King are reflected in this posthumous work. The group includes Paul Todd, president, and several hundred supporters of the National Popular Government League; Gordon Clapp, former Chairman of TVA; Dr. Harry Curtis, former director of TVA; Wilson Ragsdale of Senator James E. Murray's staff; John M. Carmody, an early administrator of REA; Dr. Horace Gray of the University of Illinois; John Robertson and his wife, Hazel Norris Robertson; Dr. James C. Bonbright of Columbia University; Marion Hedges of the Brotherhood of Electrical Workers; Benton MacKaye, writer and conservationist, and others consulted while this book was being prepared for publication.

Since Judson's death, the editing, proofing, indexing and similar work have been performed by Benton Stong, Darel McConkey, Dorothy S. Curtis, Clay Cochran, George Taylor, and Jean Torgerson, who have given liberally of their time and efforts.

Special appreciation is due M. B. Schnapper of Public Affairs Press for his patience, his unfailing co-operation and assistance in all the steps between manuscript and book.

BERTHA HALE KING

Takoma Park, Maryland

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CHAPTER I

THE FIRST MUSCLE SHOALS POWER BILL

Shortly after the inauguration of William McKinley in 1897 a group of Alabama business men residing in Florence, Sheffield, and Tuscumbia organized the Muscle Shoals Power Company and applied to Congress for permission to construct a lateral canal and hydroelectric power plant at that point on the Tennessee River. Acting in accord with the customary practices of their time, they envisioned a profitable business venture and no trouble. They little realized that their request would spark a dramatic controversy over federal versus state jurisdiction of the latent water power in the nation's navigable rivers, a controversy that would continue for 60 years and remain unsettled. Their scheme was approved by Congress and the President, as will presently appear, but let us first take a glance at the stage-setting of the drama.

The geologic dip that gave birth to world-famous Niagara Falls is only 21 feet higher than the one creating the nationally famous Muscle Shoals on the Tennessee. Both were serious obstacles to the early explorers and settlers of colonial times for whom navigable rivers provided the best and sometimes the only practical means of inland transportation. Niagara's direct plunge of 155 feet, a miracle of nature, afforded at least some compensation for the interruption of navigation when the tourist trade became a commercial asset. No such advantage was provided by the Tennessee. There the river boiled over rocks and shoals for 37 miles before it reached its lower level where boats, rafts, and barges could proceed in safety.

Along the banks of the Tennessee River, for the 382-mile stretch between Tuscumbia in Alabama and Knoxville in Tennessee, there was a string of towns and the city of Chattanooga, all in need of water transportation. By 1826 steam boats were running regularly from New Orleans up the Mississippi, the Ohio, and the Tennessee for 260 miles to the town of Florence, where they were forced to stop at the foot of the shoals. It takes but little imagination to understand what a fearful liability these shoals were to the economic development of that great region in the heart of the Southland.

The federal government was slow to act. In 1824 President Monroe's Secretary of War, John C. Calhoun, urged action on the grounds that Muscle Shoals was one of the nation's most serious obstacles to navi-

gation. In 1828, during the administration of John Quincy Adams, a strong advocate of internal improvements, the government made a survey for a canal around the shoals and gave 400,000 acres of land to the state of Alabama. The sale of the land would defray the cost of constructing the canal. The amount realized was not enough, and neither Alabama nor the other states affected could supply the deficiency. A canal of a sort was built around Big Muscle Shoals, but this was of little worth since there were dangerous rapids both above and below. In 1838 the enterprise was abandoned.

A generation passed with nothing done. The situation was somewhat relieved by the arrival of railroads. However, river navigation was still desired. The Civil War suspended any activity. In 1871 the federal government again took up the task. A canal capable of accommodating small boats of five-foot draft was built around the shoals, but it was not completed until 1890. The waterway thus provided soon proved inadequate. By the end of the century the Tennessee Valley with an area larger than Iowa was still handicapped by lack of adequate inland navigation. Eight years more were to elapse before men of greater daring were to propose high cross river dams, with locks for navigation and generators to produce power. Meantime efforts to build small powerplants went forward.

General Wheeler's Bill. In 1898 Representative Joseph Wheeler of Alabama, an ex-Confederate general who owned an estate on the Tennessee, introduced a bill (H. R. 9335) granting the newly formed Muscle Shoals Power Company the right to construct and operate canals and powerhouses on the south side of the river. The measure was necessary because an 1890 law prohibited the construction of any dam on a navigable stream without a special act of Congress and approval by the Secretary of War. The 1890 law assumed that dams might interfere with navigation over which the federal government had unquestioned jurisdiction.

After General Wheeler retired from Congress to enter the Spanish-American War, Representative John H. Bankhead of Alabama took charge of the measure. It was referred to the Rivers and Harbors Committee of which Bankhead was a member and Theodore E. Burton, Ohio Republican, was chairman. Here began the long national policy struggle between federal and state jurisdiction over water power. Burton reported the bill favorably but with two amendments which stated: "Strike out, in lines 9 and 10, the words 'that are and always have been unsuitable and unused for the purposes of navigation' and add after line 5, page 2, the words 'and the Secretary of War is authori-

zed and directed to fix reasonable charges for the use of said power’.”

Both changes involved jurisdiction. The original phrasing would have deftly ended federal control of power by assuming that “navigable waters” did not include those portions of rivers containing shoals, falls, and rapids which in their natural state prevented the free passage of vessels. That contention was for many years asserted by the private power interests. The inserted sentence authorizing the Secretary of War to fix charges was a positive assumption of national sovereignty over water power.

Objectionable as these Burton amendments were to Bankhead, a vigorous states rights Democrat and veteran of the Civil War, he apparently accepted them in order to get the bill enacted. In the brief floor debate that followed he assured the House that charges would be levied “in case any compensation is required and just.”¹ That mild hint of resistance from the states righters was soon to change into the defiant statement, “The United States has nothing to sell.” However, the bill, with only minor Senate amendments, was passed and signed by President McKinley on March 3, 1899.

Burton and Bankhead were strong personalities. This was their initial skirmish in the conflict over national water-power policy. We shall find them as leaders of the contending forces for many years in the House and later in the Senate. Significantly, Burton’s advanced position was taken five years before President Theodore Roosevelt’s first water-power veto and three years before T. R. began endorsing conservation principles.

CHAPTER II

THE SECOND MUSCLE SHOALS BILL

The promoters of the first attempt to develop water power at Muscle Shoals did not initiate construction although Congress extended their authority for four years. The reason given was that investors were repelled by the provision that the government charge for the use of the water. There was a useful argument against federal control, but a more likely reason is that they were doubtful of the feasibility of hydroelectric undertakings.

Despite this first failure, interest in the project continued, and in 1902 William Richardson, General Wheeler's successor as Congressman from the Muscle Shoals district, introduced a bill (H. R. 14051) permitting N. F. Thompson and associates to erect a dam and construct power stations at Muscle Shoals. The Senate's counterpart was introduced by Senator John T. Morgan of Alabama. The bills proposed essentially the same privileges given earlier to the Muscle Shoals Power Company.

In the House the measure, as amended to provide charges, passed easily on June 3, 1902, but the Senate bill was reported adversely. However, in the following session the Senate passed the Richardson measure on February 18, 1903, without question or debate, and on March 3rd, to everyone's surprise, the bill received an unexpected veto from President Theodore Roosevelt. This veto was the first indication that the energetic young President's ideas on water power differed from those of the conservative McKinley who had readily signed a similar bill.

President Roosevelt's First Water Power Veto. Both the veto message and subsequent House action were important. It was Roosevelt's first endorsement of conservationist principles governing the utilization of water power which within a decade were to become political issues of national concern. The House debate was the first in Congress on the subject.

After the usual preliminaries, T. R.'s veto message stated the reasons for his action: "The recent development of the application of water power to the production of electricity available for use at considerable distances has revealed an element of substantial value in streams which the Government is or is not liable to be called upon to improve for

purposes of navigation, and this value, in my judgment, should be properly utilized to defray the cost of the improvement.”¹

High voltage transmission lines built at that time extended as far as 100 miles. A bill pending in Congress to give the Keokuk damsite on the Mississippi River to a private company reflected the increasing interest in hydroelectric projects. There was no suggestion about how the public interest in a “water-fall of great value” was to be protected but the veto message urged that “the entire subject of granting privileges of the kind referred to in this bill should be considered in a comprehensive way and that a general policy appropriate to the new considerations caused by the advance in electrical science should be adopted.”

Angered by the veto of his bill, Congressman Richardson expressed strong dissent. To prove the President in the wrong he read into the *Congressional Record* a letter from the Army Chief of Engineers, General G. I. Gillespie, approving the measure. “Why,” Richardson exclaimed, “the President of the United States should be induced or persuaded to disapprove a local bill of this character to which the Chief of Engineers of the United States Army says there is no objection whatever I cannot understand. I am surprised.”²

Richardson spoke in good faith. He and most of official Washington failed to recognize that a new era was dawning. But Representative Burton had more insight. He evidently had been doing a good deal of thinking since his approval of the first Muscle Shoals bill three years before. In a forceful rejoinder he said: “The veto of the President is right . . . it is aimed at a vicious practice . . . you cannot say this is a mere local measure. Such a bill as this fixes a precedent for the use of water power in every navigable stream in the United States . . . by which the Government after making expensive public works in rivers, constructing locks and dams or otherwise, absolutely barters away for nothing that which is of greater value than the cost of the works themselves [it throws] the door wide open for favoritism and monopoly.”

The bill was returned to the Committee on Interstate and Foreign Commerce. It was killed by a roll call vote of 200 to 64; 80 abstained from voting.³

The Third Muscle Shoals Bill. Congressman Richardson continued his efforts, but getting the consent of Congress to “a little local bill,” as he termed it, came to naught. The value of the privileges sought was beginning to be appreciated, and the growing number of applications for them from different sections of the country was requiring

much attention from Congressional committees. According to Representative William C. Adamson of Georgia, "Almost every day and every week someone is discussing the subject and seeking permission to construct dams for the improvement of water power."⁴

The General Dam Act of 1906. On February 28, 1905, a full-dress House debate was held on H. R. 19029, a bill sponsored by Representative James R. Mann of Illinois which "sought to provide for permitting private enterprise to construct dams in navigable streams." The measure laid down general conditions governing all such grants. If and when the Army Chief of Engineers and the Secretary of War found the plans and specifications complied with the conditions, Congress could pass a simple resolution authorizing the applicant to proceed. The chief condition was that the power projects should not interfere with navigation. The right of appeal was reserved, but no time limit was placed on the grants, and the vital question of "charges" was not mentioned.

Richardson opposed passage of the bill. He held that the rights of the states were being invaded and that the riparian owners would have their property rights in power destroyed by the severe conditions imposed. "We do not endeavor to infringe upon the power of the state," Mann replied. Congressman William P. Hepburn of Iowa, an outstanding Republican and chairman of the committee that had approved the bill, declared: "It is solely in the interest of saving the time of the House." Richardson's final retort was that the probable effect "is to throw all of these valuable franchises or privileges into the hands and absolutely under the control of the federal government" as well as to frighten investors and prevent the development of Muscle Shoals. He again endorsed the policies recommended by the Army Chief of Engineers (this time General Alexander Mackenzie) which he read into the Congressional Record.⁵ The bill failed to pass but was reintroduced by Mann at the next session of Congress, as H. R. 8428. It was passed and approved on June 25, 1906. A feeble but important step forward, it became known as the General Dam Act of 1906. Four years later, during the Taft administration, the Act was slightly improved under Mann's guidance.⁶

Taft on Jurisdiction. The question of jurisdiction was becoming more acute. The Roosevelt veto had assumed federal control over water power in navigable streams, a legal doctrine disputed by the electrical industry from the beginning. Promoters were trying to interest capital in the Muscle Shoals enterprise, but investors were apprehensive since policies were not determined. Seeking advice,

the Senate addressed a resolution of inquiry to Secretary of War William Howard Taft, previously an eminent lawyer and jurist. The resolution, approved January 24, 1905, requested certain information about the Muscle Shoals canal, asked Taft's opinion whether a commission should be created to make full inquiry, especially as to the disposition that should be made of the water power furnished by the shoals of the Tennessee River, and what legislation, if any, "Congress should provide for the proper adjustment and regulation of the rights of the United States and the State of Alabama and also (the rights) of the riparian proprietors and the owners of islands in the Tennessee River at these localities."

Why the Senate did not address its inquiry to the Attorney General of the United States is not clear. The resolution put the Secretary of War in an embarrassing position. Although he did not favor federal control, President Roosevelt did. An open rift with his chief was not politic. Taft resolved the difficulty by handing the resolution to the Army Engineers. A forthright and positive reply to the Senate was written by Major H. C. Newcomer, district engineer at Chattanooga, and approved by Chief Engineer General Alexander Mackenzie. "I have no suggestion to offer of any work to be undertaken by a commission," Major Newcomer stated, "I am not aware that the United States has any right or interest in the water power that can be developed at Muscle Shoals aside from its control over the water fall for purposes of navigation and its ownership of the canal properties." Taft forwarded the document, without comment, to the Senate.⁸

A Time for "Sedate Consideration". Agreeing with the Army Engineers on jurisdiction but desiring more information, Senator John T. Morgan of Alabama acted swiftly. A resolution adopted on March 2, 1905, resulted in appointment of Senators M^órgan, Edward W. Carmack of Tennessee and Lee S. Overman of North Carolina as a select committee to examine the problem of navigation on the Tennessee, "taking into consideration the Taft report."

The committee sat during the summer recess. On December 14, 1905, it presented a surprise report to the first session of the 59th Congress. It recommended a definite policy for the disposition of the nation's water powers and set a value upon those at Muscle Shoals: "We have reached the point of time in which the sedate consideration of the value of water power must prevail. It is already among the greatest actual reinforcements of the money resources of the Government aside from taxation in the improvement of the navigation of all

our mountain water courses. This new departure has come to stay and it is a great step in our progress."

Though this statement seemed to agree with the doctrine urged by Burton and expressed in the Roosevelt veto message, there was actually a sharp difference. The committee went along on the theory that it was both lawful and expedient for private enterprise to build both dams and locks; in return private utilities were to receive "perpetual rights" to the water power to be developed under state regulation. To this the progressives disagreed. The estimated cash value of the power at the Shoals, approximately \$2,996,250 a year, demonstrated why private capital should be interested.

Long Distance Transmission Arrives. Another factor, overlooked by the Senators, was coming into play. The factor was long distance transmission, which would greatly increase the value of Muscle Shoals and all other damsites. Long distance transmission ushered in the electrical age as we know it. A summary of its development throws considerable light on the economic forces behind the furor which was to engulf the country's water power policy.

After more than a century of experiment and invention, Thomas A. Edison built his Pearl Street station in New York City in 1882. Electrical service from a central station was made available to large municipalities. Stanley's alternating current transformer of 1886 made it possible to step up voltages and transmit current for much longer distances. Tesla's polyphase motor of 1888 provided smooth continuous power. In 1902 the U. S. Census Bureau reported that in the five-year period between 1886 and 1890 central station service was strictly limited but that a few stations embraced in their operations whole counties and even larger districts.⁹

By 1906 a private company in California was boasting that its 232-mile transmission line was the longest in the world; and in that year Ontario's public system of hydroelectric power was planning a 250-mile line from Niagara Falls to Windsor, a city opposite Detroit. In 1909 Percy H. Thomas, a distinguished pioneer in electrical transmission, announced formulas for the calculation of high tension lines up to 700 miles; 300 miles was regarded as technically and commercially feasible at that time.

The advent of long distance transmission revolutionized the electrical industry technically and financially, plunged it deep into national politics, and brought water power into sharp competition with coal, oil and gas in the generation of electricity. Worthless falls and shoals

in rivers remote from commercial centers possessed a million-dollar potential that led to a veritable gold rush to obtain ownership.

The pressure on Congress became severe. Prior to 1901 only 13 grants had been made on minor hydro power sites. In the next five years 17 grants were made, including the great Keokuk site on the Mississippi. In 1906 and 1907 came a flood of bills proposing more outright gifts to private companies. Forty were passed and approved by President Roosevelt. Others were pending.

Enter Worthington and Washburn. In addition to scientific improvements in the electrical field the age of the Big Dam had also arrived. Colonel J. W. Worthington of Sheffield, Alabama, dreamed of great cross-river dams and locks that would make Muscle Shoals navigable and develop power. In New York City Frank S. Washburn, president of the nascent American Cyanamid Company, needed a source of very low-cost electricity to expand his business. The two got together, organized the Muscle Shoals Hydro-electric Power Company and applied to Congress in 1906 for a permit to harness the Shoals in conformity with modern engineering concepts.

It was the misfortune of Messrs. Worthington and Washburn that other men of consequence had radically different ideas regarding the policy to be followed in exploiting the nation's natural resources. These men were soon to inaugurate the "conservation movement" as a powerful factor in politics and government. Three years later conservation became a political issue of the first magnitude, centering on whether the public interest should take precedence over private interests in hydroelectric development.

The contest over Muscle Shoals was waged for ten years until World War I settled the matter in 1916 in a manner which neither side anticipated. The efforts of Worthington and Washburn and their allies are dealt with in Chapter IV. However, attention must now be given to the conservationists since their movement has profoundly affected power policy.

CHAPTER III

WATER POWER AS A NATIONAL ISSUE

The conservation movement stands in history as the greatest achievement of Theodore Roosevelt's administration.

In his autobiography T. R. records that immediately after he returned to Washington following the assassination of McKinley in 1901 he was visited by Gifford Pinchot, chief of the Forestry Bureau since 1898, and Frederick Newell, hydraulic engineer in the Geological Survey. Pinchot laid before him the appalling situation facing the nation as a result of the rapid destruction and waste of forests and the inadequacies of existing laws to cope with the situation. Newell talked of water resources, storage dams, and why the government should undertake reclamation of arid lands. Roosevelt requested Pinchot and Newell to prepare material to use in his first message to Congress. This message of December 3, 1901, laid the foundation for the development of irrigation and forestry during the next seven and a half years. "The forests and water problems are perhaps the most vital internal problems of the United States," Roosevelt declared in no uncertain terms.

Here we have the real start of the conservation movement. To T. R. to think was to act. His attitude in this connection was soon applied not only to natural resources but also to the public services and industries based on them.

The Pioneers. T. R. has given generous credit to the men who instructed him and inspired his drastic departure from traditional public policy. Their statesmanship marked an era in American history. The dynamic leader of the group was Gifford Pinchot. A Yale graduate who had traveled abroad and studied European forestry systems, he was the first professional forester in the United States. He knew what forests meant to modern civilization as did Overton Price, close personal friend and associate in the Forest Service. Under the Act of 1905, ancient conservation practices were revolutionized and the Forest Service of the Department of Agriculture set up with Pinchot as chief.

In the Geological Survey was another man aware of the importance of the "new attitude"—Dr. W. J. McGee, an eminent geologist with a profound knowledge of water, soil erosion, and other conservation

matters—who knew the relation of these subjects to forestry, and to permanent national prosperity and stability. Both Pinchot and Roosevelt considered McGee “the scientific brain” of the early conservation movement. It is characteristic of careless American thinking that a public servant of McGee’s caliber and invaluable service is often forgotten.

There was George W. Woodruff, associate law officer of the Forest Service, later assistant attorney general of the Interior Department and still later a federal judge. He supplied the “legal briens” for the new movement. Working with Woodruff was former Yale law librarian Philip P. Wells who later became chief law officer of the Forest Service. Another Yale man, Attorney Herbert Knox Smith, at first deputy and later Commissioner of the Bureau of Corporations in the Department of Commerce and Labor, supplied official information on power company mergers at a time when the companies were insisting there were no water power monopolies in the making.

In Congress there were two outstanding House members who joined the crusade. One, a Democrat, Francis G. Newlands of Nevada, an attorney and businessman, had been fighting for state and federal irrigation laws since 1893. He sponsored the Reclamation Act (1902) recommended in T. R.’s first message to Congress. Later, as Senator, he became the leader for unified multipurpose river development throughout the nation.

The other was Theodore E. Burton, Republican of Ohio, another lawyer whom we have already found crossing swords with Congressmen John H. Bankhead and William Richardson of Alabama over water power jurisdiction in navigable streams. Burton was a vigorous foe of monopoly; *Corporations and the State*, a book he published in 1911, warned against control of politics and government by the trusts.

These were some of the principal men in whose minds the conservation idea had its origin. They were not academic theorists; they were practical administrators and experienced law makers. To be sure, long before them were other men of vision: Carl Schurz, Secretary of Interior in the 1870s; Professor Nathaniel S. Shaler, Harvard geologist; and mineralogist Charles Richard Van Hise, President of Wisconsin University. They had sounded warnings against waste in their time but to no avail.

The Start. The conservation movement began with forestry. Though the nation was pleased to assume that its timber supply was “inexhaustible,” Pinchot’s survey showed the demand for lumber to have been so tremendous during the nineteenth century that the nation’s

forests would be exhausted within two or three generations if it continued. After that what? Moreover, the survey showed that an enormous percentage of timber was still being wasted through faulty logging and by great forest fires. No adequate system of fire prevention had been provided. No system of reforestation such as existed in European countries had been taught to our landowners. Our resources of coal, oil, gas and other minerals were being depleted. The result was hasty and heedless exploitation for immediate profits with no thought of the public or the future.

A great proportion of the nation's natural resources had passed into private hands in a legal enough fashion. No moral censure could be directed against an owner using his property for his personal gain in accordance with the mores of the time. But there were thousands of cases in which great tracts of land and the mineral and forest resources that went with the land had been fraudulently acquired, especially by great railroad and other corporations. The practice was still going on.

Closely involved was the related problem of river water. Most people were surprised that water was a natural resources in need of conservation. Pinchot put it this way: "The relation between forests and rivers is like that between father and son. No forests, no rivers." And, "A river is a unit from its mouth to its source."¹ Rivers meant inland navigation, irrigation, domestic and commercial water supply, flood and erosion control, and hydroelectric power—all intensely practical political issues.

Within the forest reserves were many power sites made valuable by long distance transmission. As custodian, Gifford Pinchot came into contact with power companies, mining and lumber concerns, and other interests seeking possession of these sites and rights of way for transmission lines, practically as gifts as had been the custom. In this way he and his group were confronted with the electric power situation. The conservationists noted that water power was the only remaining great resource still largely in public possession, and they proposed to keep it there. The power industry was young but evidently destined to be a giant. Mergers had already begun; the way had been paved for ultimate control by monopoly. Prospect of the fight ahead gave zest to the conservationists' efforts. The increase in the number and size of trusts since the creation of the Standard Oil Company in the 1870's despite the Anti-trust Act of 1890, was profoundly disturbing to the country. The growth of the trusts had

become a major political issue against which all parties were inveighing in the campaign platforms.

Conservation scientists concerned with reforestation, or how to prevent a billion tons of fertile soil from being washed into the Gulf of Mexico every year, and with the best engineering methods of river control, suddenly found themselves confronted with a political problem. Pinchot acknowledged that Dr. McGee had awakened him to the danger to conservation from that quarter. Capitalists would exert political pressure and make short shrift of government measures that got in their way. Conservationists were dubbed socialist dreamers, obstructionists, impractical theorists. They retorted: "If America is transferred into an industrial and financial feudalism, political democracy will be destroyed."

While American businessmen in general were not concerned with such abstruse matters as forestry and soil preservation, there was one aspect of river development in which they were greatly interested—inland navigation. Many of them were at war with the railroad chiefs over high rates and regional discrimination. This conflict treated a timely issue that gave the conservationists their chance.

The Inland Waterways Commission. On March 14, 1907, President Roosevelt created the Inland Waterways Commission, explaining that "Numerous commercial organizations of the Mississippi Valley have presented petitions asking that I appoint a commission to prepare and report a comprehensive plan for the improvement and control of the river systems of the United States."^a

Businessmen undoubtedly expected more and higher levees for flood control and more and deeper channels for navigation. But T. R.'s directive went much further. This directive was "the first formal step" in applying the conservation idea that had originated in the Forest Bureau.^a After noting that control had been spotty and devoted to isolated individual purposes, the President announced that "the time has come for merging local projects and uses of the inland waters in a comprehensive plan designed for the benefit of the whole country. Such a plan should consider and include all the uses to which streams may be put and co-ordinate the points of views of all users of water."

Getting more specific, he continued: "Any plan for utilizing our inland waterways should consider floods and their control by forests and other means; the protection of bottom lands from injury by overflow and uplands from loss by soil-wash; the physics of sediment-charged waters and physical or other ways of purifying them; the construction of dams and locks, not only to facilitate navigation but

to control the character and movement of the waters; and should look to the full use and control of our running waters and the complete utilization of our waterways for the benefit of our people as a whole."

And then came a paragraph that challenged the very foundation of *laissez faire* control and announced the necessity for a new national policy: "It is not possible properly to frame so large a plan as this for the control of our rivers without taking into account the orderly development of other natural resources. Therefore, I ask that the Inland Waterways Commission shall consider the relation of the streams to the use of all the great permanent natural resources and their conservation for the making and maintenance of prosperous homes." That this statement was not a mere political flourish is indicated by the concluding sentence and supported by subsequent action. "The reports of the commission should include both a general statement of the problem and recommendations as to the manner and means of attacking it." The conservationists were keenly aware of the powerful opposition these proposals would arouse. Roosevelt afterward commented on "the incredible bitterness with which the great crooked special interests fought the new policy." He appointed a commission of nine, seven members of which were originators of and crusaders for the conservation movement.⁶

Less than a year later, on February 3, 1908, the commission made a preliminary report, supported by a mass of scientific data. It found that "a comprehensive system of waterways" must include not only navigation and flood control but "all other uses of water or the benefits to be derived from their control." In respect to water power it declared: "In the light of recent progress in electrical application, it is clear that over wide areas the appropriation of water power offers an unequalled opportunity for monopolistic control of industries. Wherever water is now or will hereafter become the chief source of power, the monopolization of electricity produced from running streams involves monopoly of powers for the transportation of freight and passengers, for manufacturing, and for supplying light, heat, and other domestic, agricultural and municipal necessities, to such an extent that unless regulated it will entail monopolistic control of the daily life of our people to an unprecedented degree. There is here presented an urgent need for prompt and vigorous action by State and Federal governments."

The new national water policy was proposed in these words: "We recommend that hereafter any plans for the use of inland waterways in connection with interstate commerce shall regard the streams of

the country as an asset of the people, shall take full account of the conservation of all resources connected with running waters and shall look to the protection of these resources from monopoly and to their administration in the interests of the people."

The President had asked for suggestions as to the manner and means of attacking the problem. The answer was bold and clearcut: Congress should enact legislation empowering the federal government to take the lead and to act on development proposals. Congress should also enlist the cooperation of states and municipalities and provide these requisites: "expert framing of a definite policy; certainty of continuity and coordination of plan and work; expert initiative in the choice of projects in accordance with terms of cooperation and the widest opportunity for applying modern business methods." ⁵ All of these requisites, significantly, were incorporated in the corporate form of organization under which the Tennessee Valley Authority operates today.

Finally the commission recommended that the President be authorized to appoint and organize, with the advice and consent of the Senate, a National Waterways Commission to bring into coordination the Corps of Engineers of the Army, the Bureau of Soils, the Forest Service, the Bureau of Corporations, and other branches of the public service whose work related to inland waterways. ⁷

All nine members of the commission signed the report with the exception of General Alexander Mackenzie, Chief of Army Engineers, who filed a dissenting supplementary report. In diplomatic language he objected to the inclusion of related subjects not "clearly and necessarily associated with the subject of channel improvement" and to the creation of a permanent waterways commission. Regarding the latter he stated: "I believe a recommendation for so radical departure in the methods of planning and executing the improvement of waterways is at least premature [because] all work proposed for the permanent commission can be equally well provided for by the existing agencies of the Government." By "existing agencies," he meant, of course, the Army Engineers and the Reclamation Service. ⁸

Senator Newlands signed the report and also submitted a supplementary report aimed at General Mackenzie and the States Righters:

"I concur in the report of the Commission, but desire to emphasize my belief that it is of the highest importance that in dealing with subjects relating to the respective powers, rights and interests of the nation, states, municipalities, corporations and individuals, large powers and a comparatively free hand should be given to an adminis-

trative body of experts in the full development of projects, lest the complexity of the transactions, the time necessary to secure congressional approval, and difference of view as to purpose or method, may result in indecision and delay, the worst enemies of effective development.

"An ample fund should be provided, to be reinforced from time to time either by legislative appropriation or by bond issue, and the administrative board or commission should be given the power, not only to instigate projects, but also, when determined to be feasible, to enter, with the approval of the President, upon their immediate execution; but the power should be limited so as to prevent such administrative body from entering into any contract unless there are sufficient unappropriated moneys in the fund to meet the cost thereof.

"Unless some method of construction and development, insuring prompt decision and execution and continuous work by a body of experts is adopted, I fear that the best of projects may be wrecked in the shoals and quicksands of legislation."

The report is of great historical importance. Herein were first clearly drawn the battle lines around which contending forces have fought for a half century. The issues were (1) national versus local or regional advantage, (2) public welfare versus private monopoly, (3) comprehensive and multipurpose versus single and piecemeal development, (4) scientific versus political pork-barrel planning, (5) federal versus state jurisdiction, and (6) modern unified regional management versus conflicting controls by old bureaus.

In preparing its report the commission had traveled widely, accompanied by a corps of scientific experts headed by the commission's secretary, Dr. W. J. McGee. Newspaper publicity reached its peak in October 1908, when the party, traveling on a government steamer with President Roosevelt as its guest, made an inspection trip on the lower Mississippi. In his speech at Memphis T. R. announced his intention to call a governors' conference on conservation.

While the commission in its report spoke definitely of water power as an "intrinsically permanent asset which should be utilized for the benefit of the people," and warned against private monopoly which, "unless regulated will entail monopolization of control of the daily lives of our people to an unprecedented degree," yet nothing specific was offered as a remedy. Three months later, however, the President himself became specific.

The Rainy River Veto. In April 1908 Congress passed, with the approval of Army Chief of Engineers General Mackenzie, a bill ex-

tending for the fourth time a grant to the Rainy River Improvement Company to construct a power dam on the Rainy River, an international stream in northern Minnesota. Although ten years had elapsed since its original enactment, nothing had been done. Roosevelt vetoed the measure in a message to Congress which put the power policy of the conservationists in concrete form and began a new era in water power legislation. The governing principles and specific recommendations were stated at the conclusion of the message as follows:

"The present policy pursued in making these grants is unwise in giving away the property of the people in the flowing waters to individuals or organizations practically unknown, and granting in perpetuity these valuable privileges in advance of the formulation of definite plans as to their use. In some cases the grantees apparently have little or no financial or other ability to utilize the gift and have sought it merely because it could be had for the asking.

"In place of the present haphazard policy of permanently alienating valuable public property we should substitute a definite policy along the following lines:

"First, there should be a limited or carefully guarded grant in the nature of an option or opportunity afforded within reasonable time for development of plans and for execution of the project.

"Second, such a grant of concession should be accomplished in the act making the grant a provision expressly making it the duty of the designated official to annul the grant if the work is not begun or plans are not carried out in accordance with the authority granted.

"Third, it should also be the duty of some designated official to see to it that in approving the plans the maximum development of the navigation and power is assured, or at least that in making the plans these may not be so developed as to interfere with the better utilization of the water or complete development of the power.

"Fourth, there should be a license fee or charge which, though small or nominal at the outset, can in the future be adjusted so as to secure a control in the interest of the public.

"Fifth, provision should be made for the termination of the grant or privilege at a definite time, leaving to future generations the power or authority to renew or extend the concession in accordance with the conditions which may prevail at that time."¹⁰

Nothing Short of a Crime. To men who sincerely believed that the latent power in a waterfall was the personal property of whoever owned the adjoining land, under state sovereignty, Roosevelt's ideas ap-

peared not only legally absurd but socially immoral. Their position was forcefully stated by Captain William Patrick Lay, founder and president of the Alabama Power Company, a man of great energy and foresight, whose dream of industrial empire included the harnessing of the rivers of Alabama with a great dam at Muscle Shoals as the capstone of his hyroelectric generating system. In trenchant English this water power pioneer struck at the ideology of the "self-styled conservationists," "taxationists," and "would be bureaucrats" in a fashion that clearly reveals the attitude of utility executives of his day. Official Washington and a majority of the Congress shared his views. He stated:

"The fundamental principles underlying our form of government, holding sacred private property, private rights and privileges, have weathered the storm of ages. Why are we now called on to abandon those safe-and-sound moorings, follow off after false Gods and branch out into untried fields of theory?

"We must insist that, on the sanctity of private property, our constitution and laws, more than all else, depends our proper future progress.

"The water powers, in their undeveloped state, along the rivers of this country belong to the riparian owners, under the sovereignty of the states, subject, of course, to the prior rights of navigation and navigation only. This is a property right, the protection of which is guaranteed by the constitution of the United States and those of the several states . . . The most unfortunate feature in connection with this move, however, is the fact that a goodly number of people advocating these confiscatory measures are officials of government who are oath-bound to support the constitution and the laws of the land. It is bad enough for a citizen to advocate such measures, but for an official of government, who is still resting under the obligation of his oath of office, to do so is almost beyond comprehension. From the standpoint of consistency, for an official of government to advocate such confiscatory measures right in the face of the constitution, might very properly be considered as nothing short of a crime."¹¹

But industrial promoters of Captain Lay's type, like most Americans, were unaware that the stark individualism dear to the pioneer had passed and that an era of social conscience and social responsibility had begun. The conservationists understood this; they inaugurated a vigorous campaign of education appealing to the people over the heads of the standpatters in business and government. No popular movement in our history has been handled so dramatically or with

greater success than the one that implanted the novel idea of conservation of resources in the minds of the American people. Most reforms start humbly and grow from the bottom up; this one filtered from the top down.

The White House Conference of 1908. The White House Conference of Governors on Conservation was held May 13-15, 1908. It was the first assembly of governors ever held, but not of governors only. Besides the President and 38 governors, the official photograph shows members of the cabinet, the Supreme Court, several members of Congress and four specially invited guests: John Mitchell, president of the United Mine Workers; James H. Hill, president of the Great Northern Railroad; William Jennings Bryan and Andrew Carnegie. Also present were representatives of 68 national organizations and 48 distinguished scientists and administrators.

In the President's opening address every major note sounded in the report of the Waterways Commission was reemphasized, and in addition the importance of conservation to national defense was underscored. The general principles of conservation were approved by unanimous vote. Appointment of state conservation commissions and a federal conservation commission to work in harmony was urged. In respect to water power the conference recommended "the enactment of laws looking to the conservation of water resources to the end that navigable and source streams may be brought under complete control and fully utilized for every purpose, [and] . . . that the waters should be so conserved and used as to . . . develop power in the interests of the people . . . and that monopoly should not be tolerated."¹⁹

Under such auspices it was easy for anyone to laud conservation in general, but just how and by whom it was to be applied was another matter. In the background was the burning states rights issue and much hostility to federal control. On that touchy and highly explosive subject the resolutions committee was wary. The federal and state governments were urged to cooperate within their respective jurisdictions without mention of priority or what the limits might be.

Only a few speakers discussed water power. Governor Charles Evans Hughes of New York, who was battling to prevent the Morgans and DuPonts from capturing the St. Lawrence and other water power sites in his state, was by far the most specific: "They [the sites] should be preserved and held for the benefit of all the people and should not be surrendered to private interests. It would be difficult to exaggerate the advantages which may ultimately accrue from

these great reservoirs of power if the common right is duly safeguarded.”¹³

Few of the governors approved federal control. Governor Braxton Bragg Comer of Alabama was pointed in his demand for state jurisdiction: “Outside the navigation easement we believe in the riparian owner. Whatever there is in the power of these waterways belongs to us, and if the Federal Government proposes to take hold of this power and sell or rent the franchise, we believe it will be dangerous to tinker with the sacred rights of state sovereignty.” When Comer concluded, President Roosevelt roguishly remarked: “We are greatly indebted to Governor Comer for his speech against centralization. Governor, I do not understand that you object to the national government appropriating money to clear out the Muscle Shoals?” Laughter and applause followed this sally; no reply was made by the governor.¹⁴

There was ample reason for reticence or divided opinion on the part of the governors both as to practical politics and constitutional interpretation. The power companies were already potent and politically active. It was then an undecided question whether the federal government actually had jurisdiction over water power as claimed by the conservationists. The Supreme Court had not spoken, and there was room for honest argument.

Governor Joseph W. Folk of Missouri tackled the dilemma head on. He was eager to preserve the rights of the states, but he told the conference that “the states must obtain the consent of the federal government before anything can be done by the states to improve the waterways and since that consent has to be obtained, the federal government is in fact the owner, if not in theory, at least practically speaking.” He went further, saying he thought it the duty of the federal government to improve the waterways. Referring to the Missouri river, he said, “This river as well as all other navigable waterways belongs, I believe, to the federal government.” He added, “The Newlands bill ought to pass Congress.” It is of interest in our time to recall that the bill introduced by Senator Francis Newlands a few days before the 1908 conference provided for multipurpose development from source to mouth of American rivers under a unified management.¹⁵

It was one of the conference’s special guests, William Jennings Bryan, who put a definite finger on the reason why states rights had again become a national issue, 40 years after the Civil War. In his formal address, he said: “There is no twilight zone between the

nation and the state in which exploiting interests can take refuge from both. [Great applause.] My observation is that most—not all, but most—of the contentions over the line between nation and state are traceable to predatory corporations which are trying to shield themselves from deserved punishment or endeavoring to prevent needed restraining legislation.”¹⁶

The sessions of the conference came off successfully under the skillful guidance of its general secretary, Thomas R. Shipp, ably assisted by the alert Dr. McGee. The conference received much publicity, and millions of Americans added a new word—conservation—to their vocabularies. President James B. Angell of Michigan University approved the work of the conference with these words: “I am sure this will stand upon the record as a great historical event.” His prophecy proved sound.

The Joint Conservation Conference. With this auspicious beginning the campaign for conservation went forward with remarkable speed. Three weeks after the White House conference the President, on June 8, 1908, created a commission to make the first survey of the natural resources of the nation. While the survey was under way a conference was held in Washington with President-Elect William Howard Taft as chairman. It was attended by the governors of 20 states, representatives of 22 newly created state conservation commissions and of 60 national organizations. The states rights issue was raised by Governor Comer’s appointment of Capt. W. P. Lay, of the Alabama Power Company, to represent the conservation commission of Alabama. The Captain approved “proper conservation” and recommended in a 74-page paper that the government “act in conjunction with private capital in the development of water in terms equitable to the government and to the riparian owners of the water power rights”—the partnership idea.

Captain Lay’s resolution was not approved but one offered by Senator Francis G. Newlands was endorsed unanimously: “We urge the prompt adoption of the broad plan recommended by the Inland Waterways Commission for waterway development under an executive board or commission appointed by and acting under the direction of the President of the United States.”

First Survey of Natural Resources. President Roosevelt’s commission to make a survey of natural resources was set up in four sections with members of Congress as chairmen of the various sections. All were conservatives save Representative Burton. The executive committee headed by Gifford Pinchot and composed largely of the sec-

retaries of the four sections, all liberals, did the actual work. Handicapped by lack of an appropriation, Pinchot, with orders from Roosevelt, commandeered scientists in various government bureaus, secured volunteer help from civilian sources and in six months, working under great pressure, produced the first inventory of the country's resources and the only one for years to come. When the President sent the National Conservation Commission's report to Congress on January 22, 1909, as a basis for legislation, he described it as "one of the most fundamental documents ever laid before the American people."¹⁷

The James River Veto. On January 15, 1909, T. R. shocked Congress and the utility world again by vetoing a bill authorizing William H. Standish to build a power dam on the James River in Stone County, Missouri. The doctrine laid down in the Rainy River veto of the previous April was reaffirmed and expanded in still more forceful words. He found the bill did not protect the public interest and in effect read Congress a lecture on its responsibilities. "When the public welfare is involved," T. R. declared, "Congress should resolve any reasonable doubt as to its legislative power in favor of the public and against the seekers for a special privilege . . . The people of the country are threatened by monopoly far more powerful . . . because in closer touch with their domestic life than anything known to experience . . . the great corporations are acting with foresight, singleness of purpose and vigor to control the water powers of the country. They pay no attention to State boundaries and are not interested in the constitutional law affecting navigable streams except as it affords what has aptly been called 'a twilight zone' where they may find a convenient refuge from any regulation whatever by the public, whether through the national or the state governments." T. R. concluded his veto with these words: "I esteem it my duty to use every endeavor to prevent the growing monopoly, the most threatening that has ever appeared, from being fastened upon the people of this nation."¹⁸

The campaign continued. On February 18, 1909, the North American Conservation Congress was held at the White House. Delegates came from Canada, Newfoundland, Mexico, and the United States. After five days a declaration of principles was adopted urging conservation of resources and condemning waste. It recommended "exclusive ownership and control" of all waterways, urged that no rights to the use of water power in streams be granted in perpetuity, and proposed that leases and grants be made for a definite period but "no longer than is required for reasonable safety of investment." More

over, strict regulation of rates was demanded "to the end that undue profit or extortion may be prevented."¹⁹

While the North American congress was still in session, Roosevelt invited 45 nations to participate in a world conservation congress at the Hague. However, the project was dropped after he left the White House.²⁰

Shortly before Roosevelt was to leave office he ordered Garfield and Pinchot to prepare a list of important water power sites which he might withdraw from entry before March 4, 1909. This was done. As a result a million and a half acres and 16 western rivers were withdrawn in the public domain in 1909. These withdrawals were not made to prevent development of water power or impede lumbering, mining, or agricultural settlement indefinitely, but to hold possession until Congress enacted laws protecting the people's rights in their national properties. If the incoming President should cancel the withdrawals or Congress remain inactive, the responsibility would be theirs. Roosevelt had done his best. It was his last official act to protect the nation's natural resources.

Congress Resists and Taft Retreats. We have already noted the hostility of corporate enterprise to the conservation policies. They battled with indescribable bitterness and with great effect. A few members of Congress took an active part in the conservation movement, but most of the leaders in both parties and a controlling majority in Congress definitely opposed the "socialistic" performances of Roosevelt and his "Tennis Cabinet." The conservation program was too sharp a break with current practices; besides it was politically unwise and even perilous for many members. It had to be stopped despite its popularity. Opposition had been shown by the passage of grants that ignored the Rainy River veto principles, and now resistance took the familiar form of denying appropriations.

On August 10, 1908, Roosevelt created a Country Life Commission with Dr. L. H. Bailey, dean of the College of Agriculture at Cornell University as chairman. The commission's report in the following January revealed many sensational facts about living conditions and income on American farms. When Roosevelt asked Congress for \$25,000 to correlate and publish the mass of material collected by the commission, his request was refused. To President-elect William Howard Taft this refusal was notice of open revolt in Congress.²¹

During the presidential campaign and before the inauguration, the "Old Guard" of the Republican Party began to exert pressure upon Taft. They had had enough of the Square Deal; they wanted a

return to the old order of things. As to forestry, mineral rights, and water power, Pinchot's policies had been idealistic, impractical, and a hindrance to industrial progress. Conservation might be good, but let's be reasonable.

The kindly William Howard Taft, who detested controversy, was forced to choose between militant conservation and a rupture within his party. He took the middle road, but the hour was too late for such strategy. The resultant split between the reactionary and insurgent wings of the "Grand Old Party" caused one of the most bitter and spectacular feuds in our political history, leading to the formation of the Progressive or "Bull Moose" party, the defeat of Taft, and the election of Woodrow Wilson in 1912.

President Taft was neither a traitor to nor full-fledged leader for effective federal power policies. Roosevelt's methods were not his. By nature a jurist with an innate reverence for written law, he was quite honest in his belief that Roosevelt was wrong in holding as he did in the James River veto, that the Chief Executive in case of doubt over legislative powers should resolve the doubt in the public interest, as against special privilege. For Taft the power had to be specifically stated, and better still, be upheld by the courts no matter what the practical emergency might be.

As president-elect, Taft had asked Congress to continue and finance the National Conservation Commission, but as President he did not renew the request. On August 5, 1909, at the end of the special session of Congress called immediately after his inauguration, he signed a bill authorizing a power company to build a dam on the Savannah River in South Carolina. It contained the provisions that had caused Roosevelt to veto the Rainy and James river legislation. Representative James R. Mann of Illinois told the House in effect that he had talked with the President and the bill would not be vetoed since Taft did not feel Congress had the constitutional right to levy charges based on ownership of waters.²²

Roosevelt had urged a revision of the defective General Dam Act of 1906. Knowing that he would veto any bill that did not establish federal jurisdiction and levy charges for use of waters, Congress had done nothing. On April 11, 1910, however, Representative James R. Mann, chairman of the House Interstate and Foreign Commerce Committee, reported a bill to amend the Dam Act of which he was the principal architect. The Mann bill was at once denounced by the conservationists as an abortive compromise, somewhat better than the original act, but ineffective in the most important particulars.

Charges for use of water were provided but they were not based on the principles of regulation and the right of the government to control power. There were other grave weaknesses, but the bill passed without roll call and Taft signed it on June 23 without protest.

On January 7, 1910, for reasons to be discussed later, he had dismissed Chief Forester Gifford Pinchot, the country's outstanding advocate of water power regulation, and appointed Dr. Henry Graves of Yale, noted conservationist, as Pinchot's successor. As expected, Taft also canceled many of Roosevelt's precipitate withdrawals of land to protect water power sites. Doubting that T. R. had legal authority to make these withdrawals, Taft asked Congress for specific authority and received it. The Reclamation Bureau and other agencies were ordered to reexamine all withdrawals. Speaking at the second National Conservation Congress in the following September, Taft declared that Roosevelt had "hastily withdrawn," on the recommendation of the Reclamation Service, about four million acres in 29 river basins in 9 states. Taft went on to announce the withdrawal of 3,475,442 acres "because they did not contain power sites." Protection had gone forward, however, and under Taft's guidance 1,456,899 acres, covering all the power sites included in the first withdrawals, and many more, on 135 rivers in 11 states, were withdrawn. "The disposition of these power sites," Taft explained, "involves one of the most difficult questions presented in carrying out practical conservation."

It was a tense atmosphere in which the Second National Conservation Congress was held in St. Paul, September 5-8, 1910. The "terminated" Gifford Pinchot was present, and the Congressional investigation of the Ballinger-Pinchot controversy in which President Taft had fared badly had only recently reached a conclusion. Ex-President Roosevelt, back from a lion hunt, was to speak the day after Taft delivered his address. The whole nation was anticipating a feud between the two men over conservation issues. States righters and nationalists were present in force and the mild applause following President Taft's speech was as nothing compared with the ovation given the redoubtable "Teddy" when he reviewed the whole conservation fight, declared for vigorous leadership and in effect rejected Taft's course of action. He castigated Representative James A. Tawney of Minnesota with whom Taft was collaborating; and he did not omit from his remarks the agents of the power companies posing as disinterested citizens at such congresses. As to states rights, Roosevelt declared: "The essential question is not one of hairsplitting

technicalities. It is not really a question of state against nation. It is really a question of the special corporate interests against the public interest of the people." Hence, he was for federal control because it would be more effective.²³

While "insurgent" Republicans and Democrats made considerable trouble, the power interests and their conservative friends in the federal Congress held their own very well during the Taft administration until August 12, 1912, when they received a shock. On that day the President vetoed a bill by Senator John Bankhead and Representative Oscar Underwood granting the Alabama Power Company the right to construct a dam across the Coosa River in that state. His grounds were that no provision was made for charges ("a fatal defect in the bill".) The veto was a complete reversal of the President's former position.²⁴

Later Taft explained to Bankhead that he had a "Bull Moose" Secretary of War, Henry L. Stimson, who had written the veto message and that while he personally had not changed his views he could not afford to have a row in his official family (Stimson was again Secretary of War during World War II under Franklin D. Roosevelt). Taft's defection was a heartbreaking disappointment to the conservation group. They were not crackpots as charged by the opposition; rather they were experienced men of high personal attainments with an *esprit de corps* not to be matched for a generation. They had expected James R. Garfield to be reappointed Secretary of the Interior. Instead, Taft selected Richard A. Ballinger, a corporation attorney of Seattle and pronounced conservative. Eight months later, Pinchot informed Taft in detail of Ballinger's activities, declaring him to be "the most effective opponent of conservation policies we have yet had."

As the weeks passed their gloom increased. Taft was taking counsel from such reactionaries as Senator Nelson W. Aldrich and Representatives Cannon and Tawney. He was openly hostile to Dolliver, Clapp, Burton, and LaFollette of his own party. The final blow had come when Pinchot was dismissed in the midst of his conflict with Ballinger over the Secretary's approval of the Cunningham "claims" to Alaskan coal lands. Pinchot held the claims fraudulent, only to have the President support Ballinger. That famous episode cannot be reviewed here except to recall that the immediate cause of removal was publication of Pinchot's revealing letter to Senator Jonathan P. Dolliver of Iowa, criticizing the conduct of the administration. The letter was, of course, a breach of discipline, and the President was technically right in terminating Pinchot's service.

The importance for this narrative is that "G. P.," as Pinchot was known, deliberately sacrificed his position rather than condone by his silence the betrayal of a chief executive's pledge to support vitally important policies. William Kent, a wealthy Republican Congressman from California, expressed the sentiments of the liberals of that time: "Pinchot was dismissed because he obviously saw no other course than to court dismissal . . . When the trees are gone and the lack of lumber and fuel is acute, it will be recalled that Pinchot knew that the trees could be used without being annihilated and that he cared for posterity although posterity had done no more for him than for the lumbermen who waste and burn many times the timber they save and use . . . President Taft has slipped and slid into a place where he had to break with the Roosevelt policies and the Roosevelt men. Not this vital break but the tottering unsureness of his steps and his inability to realize the sinister nature of his surroundings are the things to regret and to criticise."²⁵

Conservationists Organize for Battle. Soon after Taft's inauguration in 1909 the pioneer conservationists, aware that their movement no longer had a dependable leader in the White House, formed two organizations to carry on their crusade. The first of these, the National Conservation Association, was organized at Cambridge, Massachusetts, on July 29, with Charles W. Eliot, the head of Harvard University, as president. Gifford Pinchot became the president the next year and remained the intermittent president and active leader of the association until it was disbanded after the passage of the Federal Water Power Act of 1920. Throughout the struggle to obtain passage of the act the association refused to compromise and fought for the basic principles laid down at the beginning. Thomas R. Shipp, who had been the able secretary of the White House Conference of Governors, was chosen as executive secretary. Later, Harry Slattery became secretary; he held the position until it was discontinued.

The second organization, styled the National Conservation Congress, was formed at Seattle on August 26, 1909, a month after the first. It was announced as "the logical outcome" of the White House Conference of Governors. B. N. Baker, a progressive business man from Maryland, was elected president and Thomas R. Shipp executive secretary. The Congress differed sharply from the Association in several important respects. Governors, mayors, chambers of commerce, and other business concerns as well as national and state associations were authorized to appoint delegates. The result was that states righters appeared in increasing numbers for the first five congresses

and that their proposals, plainly dictated by private interests, were rejected. But in 1916 representatives of water power and lumber companies gained control and not only endorsed the Shields and Myers bills backed by the power companies but rejected the Pinchot-Roosevelt forestry policies. Pinchot and Charles L. Pack, president of the American Forestry Association, promptly repudiated the resolutions. Public disfavor followed, and no more congresses were ever held. Because of the speakers' prominence and the spectacular conflicts engendered by the power trust delegates, the Congress received tremendous newspaper publicity and from 1909 to 1916 was the most influential factor in educating the nation's citizens to the true character of the conservation controversy and the means employed to disrupt the movement. For that reason a brief summary of the six annual meetings is in order.

Water Power at the Congresses. The most violent conflicts came not over conservation of forests, soil, and minerals, as might have been expected, but over water power. The reason is clear. Only an estimated 10 percent of the nation's potential hydroelectric energy had passed to private ownership. The conservationists were determined that the remaining 90 percent should be retained by the federal government. Here was a prize worth not millions but billions. The conservationists believed that only the federal government was strong enough to protect the national welfare.

Power company executives were determined that if they could not acquire *ownership* of power sites they would secure leases in perpetuity or as nearly as possible, with little real regulation either by the states or the national government. Their political friends battled for these objectives under the banner of states rights, a strategy clearly revealed at the first conservation congress in Seattle. Governor Marion E. Hay of Washington had appointed ex-federal Judge C. H. Hanford to represent his state. Hanford was placed on the resolutions committee where he refused to approve the majority report endorsing joint federal and state control. He proposed to put all control under the states. In a heated speech he dubbed danger from private power monopoly as a "bogymen", provoking a caustic rejoinder from Governor George C. Pardee of California and Hanford lost out.²⁶

The Second Congress. A year later, at the St. Paul meeting, Governor Hay charged that the "left-wing" conservationists were blocking development of western resources. "Instead of calm, dispassionate, logical discussions of the subject,," he complained, "we hear and read

on every hand exaggerated statements, misrepresentations, false accusations, dire prophecy and passionate appeals to prejudice, avarice and lawlessness . . . property (water power) is just as much ours as is the jackknife in our pockets." This amazing fling at the Pinchot-Roosevelt forces, alluded to as "faddists, dreamers and enthusiasts," concluded with the statement that "The address made here this morning by President Taft is in line with the western idea of conservation as I understand it."

The attack was too vitriolic for Governor Walter R. Stubbs of Kansas, who was presiding over the session. He sharply denied that the Pinchot-Roosevelt faction was holding up the west to benefit the East: "I say to you that it is the great electric power organizations and combinations—it centers down to five or six fellows who are trying to monopolize all the power sites in the United States! That's what is the matter now; and those fellows think if they could get the whole thing in the hands of state legislatures they could dicker and trade with them."

The date of the Congress was September 5, 1910. President Taft's address in defense of his stewardship brought close attention, mild applause, and general approval but when he touched on "water power sites," he met with constrained silence. After stating the case between federal and state control he sidestepped the real issue: "I do not express an opinion upon the controversy thus made or a preference as to the two methods of treating water power sites," adding that he would "submit the matter to Congress with all the arguments."²⁷

Excitement over Taft's surrender of leadership and the tilt between Governors Hay and Stubbs was mild compared with the tumult of enthusiasm which greeted ex-President Theodore Roosevelt on September 6; Teddy was deeply resentful over Taft's retreat on conservation. The St. Paul audience and the nation expected him to speak his mind; he did not disappoint them. His address started the warfare that led to the organization of the Progressive or "Bull Moose" party and Taft's subsequent defeat.²⁸

Roosevelt reviewed the history of the conservation movement since the White House Conference of 1908. He pointed out that a national conservation commission had been appointed to carry out the conference program and that Taft had acquiesced in killing it. This thrust threw the audience into an uproar. Coming to the power issue, "the most important," Roosevelt declared, in obvious scorn of Taft's straddling, "It is not a question of hair-splitting legal technicalities" or "of state against nation It is really a question of special corp-

orate interests against the popular interests of the people It's a comical fact that the most zealous upholders of states rights are big business men who live in other states, principally in the East. *The most effective weapon is federal laws and the federal executive. That is why I so strongly oppose the demand to turn these matters over to the states.*"

The official texts show Taft got "applause," Roosevelt got "great applause," "tumultuous applause" and "continued cheering." Emotion so expressed indicated that history was in the making. The editor of the influential agricultural journal, *Wallace's Farmer and Iowa Homestead*, Henry C. Wallace, was president of the third conservation congress, held at Kansas City, September 25-27, 1911. The meeting was devoted principally to soil conservation, but other subjects were included. The distinguished guests included Taft and William Jennings Bryan, thus preserving the nonpartisan character of the gathering. Judge Ben B. Lindsay, of Denver, founder of the juvenile court system, spoke on child life; Herbert Quick, novelist and farm editor, discussed railroads and the farmers; and Senator Robert L. Owen of Oklahoma urged support for his bill to create a national health department. There was conflict over hydroelectric power, and Mr. Bryan, aware of the pressure from the states righters, paid his respects to their real purpose, thus: "My observation is that you very seldom have a conflict between State and Nation unless some private interest is attempting to ignore the rights of both State and Nation. Back of this controversy . . . you will find the interests of the predatory corporations."²⁰

The Fourth Congress. The Fourth Conservation Congress was held at Indianapolis, October 1-4, 1912, in the midst of the presidential campaign. It was highlighted by speeches from the opposing candidates. Governor Woodrow Wilson, the Democratic nominee, eloquently praised the conservation movement. President Taft assured the Congress in a message sent from Washington that his interest in conservation had "not diminished in the slightest." Both candidates, however, avoided mention of how conservation was to be accomplished. Two Rooseveltian Square Dealers from Taft's official family were more definite.

Secretary of War Henry L. Stimson in a brief review of national power policy observed that "we have but recently passed from an era of exploitation to an era of conservation." He followed with a powerful argument "to show from these facts that the jurisdiction of the Federal Government over navigation must necessarily include juris-

diction over water power as an incident of navigation," a legal position that the United States Supreme Court sustained 28 years later in the New River case. Stimson specified steps taken under the Taft administration to prevent looting of water power resources, emphasizing that the right of the federal government to regulate services and to make charges when granting water power permits had been asserted. He cited the Coosa River veto as evidence. The Secretary was representing Taft at this meeting and generously gave him full credit for the forward steps although, as we have seen, it was Stimson who only five weeks before had induced Taft to reverse his former position and veto the Coosa River bill.

Still more militant was the new Chief Forester, Henry Graves, who charged that the lumber interests, once openly opposed to conservation and the national forestry policy, were currently "professing allegiance to the conservation principle even while attempting to break it down." He warned that a rider proposed for the Department of Agriculture's appropriations would turn over to the states the management of land and natural resources of every kind. Although the rider was thrown out on a point of order it received a surprisingly large amount of support in Congress. Graves also pointed out that "the object of the whole states rights movement as it affects the national forests is to transfer to private owners for speculative or monopolistic purposes public resources of enormous value." The same went for water power hence—"The problem of water control is no less a national duty."⁸⁰

A speech by "Uncle Henry" Wallace, as he was introduced by lumberman J. B. White, president of the fourth congress, significantly indicated the influence of the two conservation bodies on the federal Congress and public opinion; it also revealed the growing dissension within the conservation camp itself. Wallace declared that the water power bills containing "concealed jokers" which failed to pass or were vetoed would have succeeded "had it not been for the white light thrown upon the problem by the second [St. Paul] National Conservation Congress." Evidently Wallace believed that the Congresses strengthened the arm of Secretary Stimson. Of the permanent effects of these efforts, Wallace said: "The historian of the future alone will be able to measure the beneficial results of the fierce conflicts between those who would despoil these resources [forest and water power] for private gain and those who would conserve them for future generations. We can, however, see some of the results in the change in the policy of our National Administration . . ."⁸¹

The astute managers of the congresses were aware that opinions

voiced by famous speakers who could command headlines was one thing and that impartial evidence was another. Hence a number of experts were invited to the conventions. A noteworthy paper on water power conservation was read by W. C. Mendenhall, later to become chief of the Geological Survey. He pointed out that although the conservation movement seemed to rise suddenly in 1908, scientists and investigators, in and out of government, had during the preceding 20 years been methodically assembling the facts that made the movement possible. One of the scientists, Dr. McGee, had died of cancer a few days previously.

The Fifth Congress. The mounting disagreement in evidence at the Indianapolis conference brought about a spectacular conflict in the fifth conservation congress held November 1913, in Washington, D.C. Wilson had been elected President on a strong conservation platform after endorsing the cause at Indianapolis. A radical administration bill was expected to be presented to the Democratic Congress. The investment and utility world was apprehensive. If not defeated outright the bill must be rendered as harmless as possible. The position of the power companies was voiced to the conservationists by the former chief hydrographer of the Geological Survey, M. O. Leighton, who knew more than anyone about the location and value of power sites. Leighton, who claimed to be a "sensible" conservationist, had resigned his government position and set up as a consulting engineer. He assured the delegates that the water power industry was in a "state of stagnation." He was for proper regulation "but why rub it in?" This argument was endlessly repeated in the federal Congress. For many years thereafter Leighton represented the private utilities.

There was a large attendance at the fifth Congress. Since 1908, gubernatorial enthusiasm had slackened, but a large number of states rights men were in attendance. The sessions were lively. The report of the resolutions committee (one member from each state chosen by the state delegation) favored state control, indeterminate permits instead of 50-year leases. The report was cloudy on the tolls issue. During the hectic debate that followed it was charged that the regulations committee and the congress itself had been stacked with power trust men. In the midst of the uproar Harry Slattery, secretary of the National Conservation Association which had 169 delegates out of a total membership of 603, took the platform and read names from a long list of utility officials, attorneys, and employees who were in attendance as delegates by appointment of governors. This move temporarily stunned and pacified the meeting. A stalemate existed

until the final session when Gifford Pinchot sprang a surprise resolution reaffirming the principles of the original conservationists and declared it to be "the solemn judgment of the fifth conservation congress that hereafter no water power now owned or controlled by the public should be sold, granted or given away in perpetuity, or in any manner removed from public ownership, which alone can give sound basis of assured and permanent control in the interest of the people."

More bedlam ensued, with uncomplimentary and unparliamentary language on all sides. Senator Bankhead of Alabama led the opposition to the resolution. Congressman Burnett of Alabama, with an eye on Muscle Shoals prospects, said: "This wonderful stage . . . is a setting of 'Ex-es'—Ex-Secretary of War, Ex-Secretary of the Interior, and another Ex-Secretary of the Interior, and an Ex-Forester. Why? Because the people would have arisen in their might and have scorned the meeting we had yesterday of the 'Ex-es' that so adorned this rostrum. It may be possible, my friends, that the Pie Brigade is here in such numbers as to vote down what is right, but gentlemen, from that body we expect to appeal to the people of the country." So it went, but the resolution was adopted, 317 to 96, and the congress finally adjourned.⁸²

CHAPTER IV

PRIVATE ENTERPRISE PARTNERSHIP

Having reviewed the rise and widespread acceptance of the idea that the general welfare should have priority over private interests in the utilization of natural resources, it is easier to understand why private enterprise failed to capture Muscle Shoals in the 1906-1916 period.

The Muscle Shoals Hydro-Electric Power Company in 1906 had proposed to make the shoals navigable by construction of great cross-river dams at which electric power might also be generated—a sound modern engineering concept. Also, the federal government was asked to “cooperate” or to go into “partnership” (this word was used in the proposal) with a private company in developing the site because it was too huge and costly for private capital to undertake. It was argued, as we shall see, that hydroelectric development of the area was not a local but a national undertaking, that it would set “an example” for other developments. Fifty years later the American people were being asked by the Eisenhower Administration to embrace the partnership idea as a new policy. Why the policy was long ago rejected will appear as this story unfolds.

Washburn and Worthington Prime Movers. The president of the Muscle Shoals Hydro-Electric Power Company was, as noted, Frank S. Washburn, a brilliant consulting engineer who was also president of the American Cyanamid Company. The first vice president was Colonel J. W. Worthington, of Sheffield, Alabama, a practical businessman whose neighbors laughed at his “dream” of harnessing the shoals with cross-river dams and making a great industrial center of the region.

Washburn’s “cyanamid process” of making nitrates required vast amounts of cheap electricity. Unable to pay the rates charged by private companies in the United States, he built a plant on the Canadian side of the Niagara River where he was able to buy low-cost power from the publicly owned system of Ontario. Back in 1906, however, he was seeking cheap power in his home country. His need coincided with Worthington’s dream. Hence a new company was formed. Six years later it was taken over by the Alabama Power Company, which desired the shoals as a unit in its superpower system.

The Initial Partnership Plan. With Theodore Roosevelt in the White House, Theodore Burton still chairman of the House Rivers and Harbors Committee, and the conservation movement near the boiling point, the proposition advanced by the promoters of the Muscle Shoals Hydro-Electric Power company evinced considerable courage. They proposed to construct three double-purpose dams (flood control was not then thought of) at the Shoals; the cost would be borne by the government and the company. The primary purpose was to be navigation paid for by the government. Incidentally, though, the company would be granted exclusive use of the water for power production in perpetuity!

On January 18, 1907, a bill to this effect was introduced by Representative William Richardson of Alabama, whose bills for lateral dams had failed. The bill (H. R. 24543) was referred to the Rivers and Harbors Committee.

The Rossell Board. Secretary of War William H. Taft took a hand and on March 19, 1907, at the request of Chief of Engineers General Alexander Mackenzie, appointed a special board of army engineers to examine the proposal; the board consisted of Colonel William T. Rossell, chairman; Colonel Dan G. Kingman, Major C. S. Rich, and two others. At its first meeting at Chattanooga, Washburn presented the case for the Muscle Shoals Hydro-Electric Power Company. After a brief outline of plans and costs he came to the question of policy involved in the partnership idea and "the proper sphere of Government in such matters."¹ The federal government should promote navigation only, he held. The states should authorize riparian owners to develop power.

Charles H. Baker, vice president of the company, dealt with costs, set at \$20,198,000. The government's "equitable share" would be \$5,683,200 to pay for the locks and one-half the cost of three 40-foot dams. The company's share would be the electrical equipment and half the cost of the dams, \$14,515,600, which, he continued, "is all our camel's back can bear." The project was too big for private financing alone.

The Rossell Board Rejects and is Sustained. The Rossell Board reported on March 12, 1908, but the report was sent back for more details and then referred to the regular Rivers and Harbors Board, which approved Colonel Rossell's findings. Finally, on January 22, 1909, Chairman Theodore Burton of the House Rivers and Harbors Committee received from the Army Chief of Engineers, now General W. L. Marshall, the information he sought. In sum, the Engineers

found that (1) since hollow buttress type of dams could not be trusted to withstand a major flood concrete dams were needed; (2) the plans were not complete, and cost estimates were not satisfactory: the government would have to build and finance a fourth dam below Florence to cost \$1,000,000; an adequate and safe project would cost \$29,552,600 or more; (3) the policy of assisting a private company was "entirely new," the Engineers Corps positively refused to express an opinion. It was for "Congress alone" to decide. They added, however: "In general, any partnership relation between the United States and a private corporation is necessarily to be closely scrutinized, as the results in the past have been that the Government, as a party to such agreements, has usually suffered thereby."

The report of the Army Engineers was a severe blow to Washburn and Worthington. Rejection of engineering plans was bad enough but refusal to take sides on the partnership idea was worse. Endorsement by the Army of the partnership policy was needed to impress Congress and the public.

The promoters steadily pursued their objective, however, and by the summer of 1911 their prospects brightened, both politically and financially. Taft was then President. The troublesome Mr. Burton had been elected Senator. The Democrats controlled Congress as a result of the 1910 election and Representative S. M. Sparkman of Florida, who favored the project, had become chairman of the all-important House Rivers and Harbors Committee. The company's financial status was strengthened when it was taken over by the Alabama Power Company. In May of 1912 Alabama Power Company came under the control of the Alabama Traction, Light and Power Company, Ltd., a Canadian concern heavily financed from London. James Mitchell became president and the three companies were soon tied by interlocking directorates. The British connection was kept secret.

The Kingman-Langfitt Special Board Approves. Meantime another special board, with Col. Dan C. Kingman as chairman, had been appointed to make further studies. This second special board settled down to work at Nashville, Tennessee, in friendly cooperation with the engineers of the companies. On February 24, 1912, Representative Sparkman's committee sent Kingman a startling directive, superseding all previous ones. Kingman was instructed to prepare two comprehensive plans and costs for utilization of "all the water power that can be developed" at Muscle Shoals with navigation. One plan proposed construction by the government in association with a private

company. Kingman's board would advertise for bids. The second plan proposed construction and operation by the government, independent of private companies.

Chairman Sparkman had to wait two years and three months before receiving his report, on May 18, 1914. This report—famous in its day as "No. 20" is a confusing document.^{*} It contained a new superior plan for harnessing the shoals, but the special board, now headed by Colonel Langfitt, rejected it. The new proposal had been reviewed by the regular Rivers and Harbors Board (Col. W. M. Black, chairman) and in turn by Chief of Engineers General Kingman, now Army Chief of Engineers. All but one of the Engineers approved the new plan.

The Army Engineers' Plan. In cooperation with the Muscle Shoals Hydro-Electric Power Company, which would develop power, the Government was to construct four concrete dams to provide navigation over the shoals and get a 100-year lease. The total cost for dams, locks, and substructures on which to erect power stations was estimated at \$18,701,000 to be advanced by the Government. Of this, \$8,575,000 would be allocated to navigation. The company would repay the remaining \$10,126,000 by an ingenious method. When Dam No. 2 (now Wilson Dam) was completed, the Government would receive \$3,000,000 in cash. A sinking fund would then be created into which the company would make annual payments, which, with compound interest paid at 3 percent, would liquidate the remaining \$7,126,000 in 99 years. After 100 years the government could buy back the company's power properties at fair value. In addition to amortization of the government loan, the company would pay \$.35 per horsepower for use of the water, but not until 200,000 horsepower had been used.

Two significant omissions are noticeable. Sparkman had asked for an estimate of the value of the power and the cost to the government of an independent project with no partnerships. He received neither.

The historical importance of "Report No. 20" justifies these details. From 1902 to 1909 the Army Engineers had remained neutral and declined to discuss questions of policy. Not so General Kingman. His report was virtually a brief for the company's bid. Since that time the Army Engineers Corps has supported private enterprise.

There was, as noted, one exception to No. 20. Col. C. S. Rich filed a minority opinion, stating that, if the latent power of the Shoals were sold to "consumers" by the Government, it would yield an annual return of \$1,285,000, equal to a 3 percent return on an investment of \$42,810,000, as against the \$18 million requested.

Pressure on Congress. At long last the Muscle Shoals Company and the Alabama Power Company had secured the endorsement of the Army Engineers. Next needed was approval by Congress and public opinion. They acted with vigor. Colonel Worthington was a leader in the Tennessee River Improvement Association, an organization of businessmen devoted to improved navigation. Its members promptly were sent copies of Report No. 20. A rally was held at Decatur, Alabama, on December 3, 1941. Nine states were represented. Congress was memorialized immediately to appropriate the \$18 million. Nine days later Chairman Sparkman's committee held a hearing in Washington attended by a large delegation from the association. Governors, senators, and congressmen were present. All speakers emphasized the great need for navigation, touched lightly on the subject of power, and cited Report No. 20 as conclusive proof that the next rivers and harbors bill should include the Muscle Shoals project. The keynote speaker at this meeting was Claudius H. Huston, a Chattanooga businessman.⁴

The Sparkman Committee Declines. The Sparkman committee was wary. Three months before, in September, 1914, its regular Rivers and Harbors bill for fiscal 1915 (H.R. 13811), had met with a humiliating defeat in the Senate. In a floor debate lasting several days, Burton, Kenyon, Norris, LaFollette and others charged that the Democrats had resurrected the "pork barrel" and that many items were a sheer waste of money. In evident reference to General Kingman's attitude and Report No. 20, Burton declared, "One of the worst features of the situation is that the Engineer Corps had lost that conservatism and care which at one time possessed them." A scandal threatened. The bill carrying \$53 million was killed. In its place Congress appropriated \$20,000,000 to be spent by the Secretary of War on projects recommended by the Army Chief of Engineers.⁵

The hydroelectric project met the same fate in 1915 when Representatives Irvine L. Lenroot and James A. Frear of Wisconsin attacked Army Engineer Chief Kingman for flouting Congress and demanded investigation of the lobby behind the Muscle Shoals bill. Nothing happened.⁶

The Final Effort, 1916. Worthington, Washburn, and president of the Alabama Power Company, James Mitchell, were determined men. In May 1916 a great "ox roast" was held at Muscle Shoals. Special trains carrying governors, editors, and notables with all expenses paid included one from Washington transporting members of Congress. Their charge that the company footed the bill was not denied.

The following month the Army Engineers made another and more complete report, which was sent to the Speaker of the House by Secretary of War Newton D. Baker. In it General W. M. Black, who had succeeded Kingman, corroborated the previous reports and stated that it was "advisable for the United States to take this opportunity of entering into an arrangement with the Muscle Shoals Hydro-Electric Power Company."⁷ This new report of the Army Engineers was shelved. The pleas of its backers were disregarded. No bill to put it into effect was introduced in Congress. There were three reasons. Several weeks before the report was filed, President Wilson had approved the National Defense Act of 1916. Section 124 of the act authorized the selection of a water power site for the production of air-nitrates needed in explosives. Wilson later chose Muscle Shoals as the site, starting another major conflict (recounted in Chapter VIII). The second reason was the great public versus private power debate, which since the days of Teddy Roosevelt had run concurrently with the Muscle Shoals issue. Congress and the nation were becoming educated on the value and importance of water power. The third reason was distrust. Supporters claimed that the primary purpose of the shoals project was "to aid navigation." Electric power and fertilizer for farmers were merely secondary benefits. But after Congress and the country had analyzed the plan, it gained reputation as a "power trust grab." Thus, the partnership idea was laid to rest in 1916 not to be seriously resurrected until the Eisenhower Administration again proposed it, 40 years later.

CHAPTER V

HETCH HETCHY AND MUNICIPAL POWER

The conservation movement endorsed two statutes enacted during the Wilson administration which had major effects on national water power policy. The statutes were the Hetch Hetchy Act of 1913 and the Federal Water Power Act of 1920.

Public approval of conservation principles was reflected in all party platforms of the 1912 presidential campaign. The three parties endorsed conservation. In the bid for votes they all carried strong endorsements and condemned waste and monopoly. President Taft's failure to champion conservation measures was a principal cause of the creation of the Progressive or "Bull Moose" party that supported the candidacy of ex-President Theodore Roosevelt with conservation as a major issue. The equally progressive Democratic candidate, Governor Woodrow Wilson, of New Jersey, also advocated conservation. The Democrats won not only the presidential election but also, for the first time in 20 years, control of both houses of Congress. The conservation banner thus passed from T. R.'s hands into the more sedate hands of the former president of Princeton University, whose outspoken liberalism was of recent vintage. Wilson's stated position on these issues was in line with the views of William Jennings Bryan, who supported his nomination, and who at the White House conference in 1908 had rejected the doctrine of states rights in respect of water power control.

The prospect of conservation victories was not promising. Just as President Theodore Roosevelt had been thwarted by conservation Republicans who abandoned their historic advocacy of a strong central government and embraced states rights in regard to water power control, so now Woodrow Wilson was confronted by a Senate majority composed of states rights Democrats and Republicans who saw eye to eye with the private power interests. Their opposition successfully blocked the passage of a water power act until the final year of his administration.

The House of Representatives on the other hand had a progressive majority composed of liberal Democrats and Republicans and outright independents plus 16 members elected by the new Progressive party—all devoted to conservation. President Wilson's own cabinet was

divided: Secretary of State William Jennings Bryan, Secretary of Interior Franklin K. Lane, Secretary of the Treasury William G. McAdoo, Secretary of Navy Josephus Daniels, Secretary of Labor William S. Wilson were proconservationist. Secretary of War Lindley M. Garrison, Secretary of Agriculture David F. Houston, Secretary of Commerce William C. Redfield, Attorney General T. C. McReynolds and Postmaster General Albert S. Burleson were lukewarm or hostile.

The electrical industry had by 1913 nominally ceased opposition to regulation by state commissions and acceded to federal control over navigation though still denying the jurisdiction of the federal government over water power in navigable streams. Veteran conservationists wondered how much the new President actually knew about the methods of effective control. Could he, under pressure from influential blocs or leaders in his own party, be misled into approving a bill containing ruinous "jokers"? Would he accept information and counsel from disinterested, informed leaders outside his party? That question was important since it was evident that nothing worthwhile could be accomplished without courageous leadership on his part. As it turned out, Wilson though uninformed was eager to receive and act on accurate information. To that virtue the nation owes the considerable advances made during his administration. His most influential friend and adviser on the subject was Representative William Kent, of Kentfield, California. Kent was an independent Republican, a wealthy business man, Yale graduate, and one of the best informed and active men in the conservation movement. Soon after the 1912 election Kent had a long conference with the President-elect on water power. The friendly working relationship thus established had important results in subsequent legislation.

Congress was called into special session on April 7, 1913, one month after the inauguration, to consider tariff reform and currency legislation which resulted in the passage of the Underwood Tariff Act and the Federal Reserve Act. But the water power issue was also urgent. All eyes were watching to see what kind of measure would be sponsored to establish a national leasing system for development of water power sites by private enterprise. Congressional leaders were approaching the question with great caution. A test case came much earlier than anticipated. On the first day of the session Congressman John E. Raker, Democrat of California, introduced a bill granting to the city of San Francisco the right to develop a reservoir site in the Hetch Hetchy Valley of Yosemite National Park. The project would not only supplant a private water company then serving

San Francisco but would in addition authorize a municipally owned hydroelectric power system.¹ Beyond that, the reservoir would prevent destructive floods and also furnish irrigation families in the San Joaquin Valley with both water and electric service. All this was possible by the construction of a great 175-mile aqueduct starting at a reservoir dam 3,600 feet above sea level. It would carry pure mountain water requiring no filtration or chemical treatment down to the cities in the valley and would generate 150,000 horsepower of electric energy on the way. The bill was H.R. 112, later H.R. 7207, an emergency measure. San Francisco had asked Congress to approve this permit for nine years and was becoming angry at being thwarted by the political influence of private utilities. A test case for the conservationists, the bill was the first one specifically applying multipurpose principles to river development.

Still more challenging, Representative William Kent, who had lost faith in regulatory commissions, inserted in the bill Section 6 which required the city to distribute the electric power to the ultimate consumers, and expressly forbidding the city to dispose of it wholesale to any individual or private utility. The penalty would be forfeiture of the grant.²

This provision made "Hetch Hetchy" a national issue. It meant competition between a public agency and the Pacific Gas and Electric Company, serving San Francisco and much of northern California. The electrical industry from coast to coast naturally opposed the setting of such a precedent, both on practical grounds and as deciding the question of the constitutional right of Congress to impose such a condition. It is of interest to note in passing that Congressman George W. Norris, of Nebraska, who had just been elected to the Senate, made his first fight for public power in connection with the Hetch Hetchy bill.

The power interests hiding behind well-meaning nature lovers launched a nationwide campaign to defeat the Raker bill. Thousands of letters and resolutions rained upon Congress from women's clubs, universities, and "Save Hetch Hetchy Clubs," mostly officered by men and women of the highest character but who had been deceived. The most influential slogan was "Save the Yosemite National Park from Destruction." The charge of destroying the 1,125 square mile park was ridiculous. Hetch Hetchy was a wonderful but inaccessible gorge through which flowed the Tuolumne River. It was unendurable to humans for all but about two months in the autumn. It was buried under 40 feet of snow in the winter and affected by

extreme heat and a scourge of mosquitos in spring and summer. The site was 30 miles from the famous Yosemite Valley. A high mountain ridge divided them.⁶ The reservoir would cover four square miles. The area of the park was 1,125 square miles. The reservoir lake would actually beautify, not impair, this swamp-like area.

While it is true that several nature lovers of great prominence such as naturalist John Muir and the author Robert Underwood Johnson opposed the bill, from disinterested motives, it was obvious that the private utilities instigated and financed the general onslaught. Such a charge made on the floor in both House and Senate by Senator Norris, Congressman Raker, and others, was not disproved. The Izaak Walton League was prominent in opposition. The discussion of beauty consumed much of the debate and on that ground many members voted against the bill. An influential offset to this argument was that Mr. Kent, as great a nature lover as any, had demonstrated his interest in conserving the beauties of nature by purchasing outright and presenting to California the celebrated redwood forest, know as Muir Woods, to save this marvel of nature from the lumbermen's axe.⁸

The House opposition was led by Mondell of Wyoming, Willis of Ohio, and Madden of Illinois, all prominent in the effort made in the twenties to turn Muscle Shoals over to private interests. They insisted that San Francisco had three other equally good sources of water supply, that irrigation farms would be destroyed and that part of the San Joaquin Valley would revert to desert, and that the government had no control over water power. Scott Ferris, chairman of the Public Lands Committee, reported the bill. Kent, Raker, and Kahn demonstrated from engineering and financial data that Hetch Hetchy was by far the best and cheapest source of water supply for the city and that the beauty of the great park would be unimpaired.

In a week-long Senate deliberation these arguments were repeated, with Key Pittman of Nevada leading the proponents and Reed Smoot of Utah heading the opposition. The debate was enlivened by a pitched battle over constitutionality, with Borah of Idaho assailing and Norris and Walsh of Montana defending. Borah's position is of interest because of his prominence as a national political figure for the next 30 years. He held that the government should turn the project over to the state of California and let it be developed by the city of San Francisco. Believing in outright public ownership of all monopolies, he said: "I am in favor of absolute public ownership.

The leasing system is a delusion so far as our natural resources are concerned—the lurking rendezvous of incompetent service to the public and corruption. The idea that is now gaining ground in some quarters that we can regulate and control combination and monopolies left in private hands will bring no relief to the people. The Republic may be in some instances strong enough to destroy monopoly, but it will never be strong enough to regulate it and control it Wherever private gain has ceased to be under the law of competition the business must then come under public ownership, where private gain will be eliminated, whether it is a railroad or a coal mine. Some will say this is State Socialism, and so far as it is, and to the extent it is, I am for State Socialism. Names have no terror for me. I am for results.”⁴

The most influential Senate speech was made by George W. Norris, who gave the history of California power company opposition to the measure. The bill passed the House in September 1913 and in the Senate three months later. In his autobiography, *Fighting Liberal*, Senator Norris devotes a whole chapter to the struggle. “Hetch Hetchy,” he writes, “is worthy of examination on the light it sheds on the exact character of the fight that has been in progress for years.”⁵ He referred to the power company tactic of camouflaging their attacks upon public projects behind other issues such as wildlife preservation, states rights or, in those days, “socialism.”

Long after William Kent wrote: “[The Hetch Hetchy bill] was signed by President Wilson with a tribute to the conservationist who had explained the situation, and had much to do with Wilson’s subsequent position on the necessity of government control of power grants and led more than anything else to the passage of the Federal Water Act seven years later.”⁶ San Francisco flouted Section 6 and sold Hetch Hetchy power to the private utility. Successive administrations failed to enforce the contract until Secretary of Interior Harold Ickes took the matter to court in 1938 and won. This is cited to illustrate the influence of private enterprise in municipal, state, and national governments.

THE FEDERAL WATER POWER ACT OF 1920

In reviewing federal water power legislation preceding 1926, Prof. Jerome G. Kerwin observed that "at the outset no one was exactly certain where the new Wilson administration stood on the water power question."¹ President Wilson was committed to conservation but was hampered by states rights Democrats who rejected these doctrines as "socialistic." San Francisco's emergency need for domestic water had brought early action on the Hetch Hetchy bill, but there remained the weightier question of control over potential power in the navigable waters of the country. Geographically and legally, two distinct categories were involved: power sites within the public domain, principally in the western states, and sites outside the public domain. The latter, involving such great rivers as the Colorado, St. Lawrence, Columbia, and the Tennessee, were more controversial.

The battle was joined in Congress in 1914 and continued through the First World War until 1920. Party lines were crossed, recrossed, and forgotten. The House was pro-conservation over the six-year period; the Senate was opposed. Many bills were introduced and hundreds of amendments offered. Endless hearings and debates were had, some colorful and heated. The issue was economic. At stake were property rights worth billions of dollars. But more time was spent on constitutionality than on any other phase. After three years of wrangling the two houses were deadlocked, and had it not been for the decisive intervention of President Wilson in 1917 his administration would doubtless have ended with no action whatever.

The Adamson Bill. The conflict opened in 1914 with the introduction on June 24 of the Adamson bill as an amendment to the General Dam Acts of 1906 and 1910 governing leases on sites outside the public domain. The author of the measure, William C. Adamson of Georgia, a conservative Democrat, was chairman of the House Interstate and Foreign Commerce Committee. According to Adamson and Democratic House floor leader Underwood, the bill had Wilson's approval. A swift reading confirmed conservationist fears. Their "must" provisions were either omitted or made innocuous. Congress was to authorize permits without charges for use of the waters. The issue

of jurisdiction was unsettled. The measure provided state regulation with federal intervention only as recommended by the Secretary of War. It authorized 50-year leases but "recapture at fair value" was made so difficult as to be tantamount to a permanent lease.

Adamson opened debate on June 30, 1914. He reviewed previous legislation, urged the necessity of a law that would induce capital to invest, and declared that his bill would speed needed development and protect the public interest. Then discussion was suspended for nearly three weeks.

William Kent Intervenes. Three days after the measure was introduced, Congressman William Kent of California wrote President Wilson: "I feel sure you are not aware of what the bill contains . . . I consider the Adamson bill the worst piece of legislation that has come before the House . . . its passage will be considered the most radically anti-conservation act that could possibly be committed." He pointed out that the proposed legislation would not only turn control over to the War Department, which had favored private rather than public interest, but would repeal existing dam legislation including the protecting features. Almost immediately the President responded: "Thank you sincerely for your letter . . . I am very much concerned that nothing such as you fear should happen and your letter made me fear that I had not given the bill as careful study as I should have given it, or rather that I had not had the necessary information in mind when I read it."²

Wilson assured Kent that he would hold conferences at once and attempt to clear up the matter. As a result, Adamson on July 20 produced a remodeled bill that met some of the objections but not all. Two days earlier debate had been resumed with Lenroot of Wisconsin leading the attack. He emphasized that Adamson's committee in preparing the bill had heard only two witnesses, Col. J. W. Worthington of the Alabama Power Company and the Muscle Shoals Hydro-Electric Power Company, and Col. Hugh Cooper, leader of the private Keokuk Dam project on the Mississippi.

After several intense floor debates led by Lenroot, Kent, Stevens of New Hampshire, Rainey of Illinois, Murdock of Kansas, and Lindbergh of Minnesota, the bill was amended to a fairly good conservation measure. The changes were stoutly opposed by Adamson, Underwood, Smith of Minnesota, and Mondell of Wyoming. A crucial test came when Sherley of Kentucky, a Democrat, proposed an amendment to fix charges for use of the waters. It was overwhelmingly adopted on August 4 by a vote of 191 to 47, with 188 not voting. The

power interests which supported the bill at the start now turned violently against it. Adamson himself voted nay.

The Ferris Bill. A week later the Ferris bill proposing to lease sites *within* the public domain was brought up in the House. Ferris and a majority of the members of the Public Lands Committee of which he was chairman were as radical as Adamson and his committee were conservative. The Ferris bill contained the standard safeguards, and had the hearty support of the conservationists. It had been prepared with great care after extensive hearings attended by authorities like former Secretaries of Interior Garfield and Fisher, and by many representatives of the private utilities.

Mondell of Wyoming conducted the debate in opposition; Raker, Murdock of Kansas and Cooper of Wisconsin appeared for the defense. The arguments were familiar. One point, however, merits attention. Representative James W. Good of Iowa, Republican, favored perpetual leases. He later opposed the completion of Wilson Dam at Muscle Shoals and still later, as Secretary of War in Harding's administration became the first chairman of the Federal Power Commission. The Ferris bill passed the House on August 24, 1914, and a substitute by Mondell was rejected by a roll call vote of 47 to 160, with 213 not voting.

In the Senate the two House bills ran into a stone wall. The remodeled Adamson bill was sent to Senator Shields' Committee on Commerce, where, without hearings, the entire text was deleted and language more to the liking of the power companies was substituted. This promptly became known as the Shields Bill.

The Ferris bill was referred to the Public Lands Committee chaired by Democratic Senator Myers of Montana. Senators Reed Smoot and George Norris were members. Myers held extensive hearings. Testifying were such prominent conservationists as Gifford Pinchot, then president of the National Conservation Association, O. C. Merrill, chief engineer of the Forest Service, and former Secretary of Interior Fisher. In opposition appeared the such powerful utility figures as Sidney Z. Mitchell, president of the Electric Bond and Share Company, John D. Ryan of New York, president of the Montana Power Company, and John H. Finney, Washington representative of the Aluminum Company of America.* Following the example of Senator Shields, Myers substituted his own text in the Ferris bill. The new Myers bill was commended by power company lobbyists and writers as a "practical" piece of statesmanship. Neither the Myers bill nor the

Shields bill came to a vote before the 63rd Congress expired March 4, 1915, with nothing done about water power.

1916—Momentous Year. The year 1916 is momentous in the history of power policy. The 1914 elections kept the Democrats in control of both houses of Congress. Preparedness for war forced the administration to take action on water power; a low-cost source was needed if there was to be large-scale production of air-nitrates for munitions. The power source—would it be public or private? The largest business lobby in that era descended on Washington, with curious results. The House reversed its stand, voting for private manufacture of the nitrates. The Senate reversed its position, deciding that the government would go into production. The history of such legislation is set out in the following chapter on war and water power, but meantime our attention centers on Senate approval of the Shields General Leasing bill (S.3331), reintroduced on January 16, 1916, and reported for passage by the Senate Commerce Committee without hearings.

"Judge" Shields was a Tennessee Democrat, devoted to private enterprise, who opposed government in business as illegal and immoral. A former Judge of the Tennessee Supreme Court, he had convictions on the limits of federal operation. His bill provided for 50-year leases to be made by the Secretary of War, no charge for use of public waters, recapture provisions so complicated as to insure perpetual leases, no effective regulation, and no preference clause. Should the government build a power plant, any surplus current beyond its own needs must be sold at the switchboard to private companies. All this had the warm approval of private utilities and the states rights advocates.

In behalf of his proposals Senator Shields argued: "In this case [power outside the public domain] the United States has no proprietary interest. It has nothing to rent, nothing to lease, nothing to sell."

Urging speedy development as a war measure, he continued:

"Those two objects, the improvement of navigation with private capital and the development of water power, go together. The investment of private capital for the public purpose of improving navigation cannot be obtained without the concurrent development of private property.

"I am informed that there is now an urgent demand for 4,000,000 horsepower of hydroelectric power for manufacturing purposes requiring cheaper power than that generated by steam and that adequate capital is now waiting and ready to be invested for its production

when our prohibitory laws are amended or repealed, so as to allow it to as provided by the provisions of this bill."

Speaking on the necessity of cheap hydroelectric power for the manufacture of atmospheric nitrogen "to provide for the farmers a larger and cheaper supply of fertilizer" and "to supply us with nitric acid for the manufacture of high explosives for military purposes," Shields made specific mention of the offer of the Muscle Shoals Hydro-Electric Power Company of Messrs. Washburn and Worthington approved by the Army Engineers.⁴ He paid his respects to "some impractical people calling themselves conservationists" for preventing legislation that would make all these good things possible. The impractical people remained unmoved. Senator Walsh of Montana denounced anything that savored of perpetual franchises: "Who will dare to say that fifty years hence it will not be the common conviction of our people that municipal ownership is the true solution of furnishing water, light, heat and power to the denizens of our cities and of transportation within them? . . . Who shall say that fifty years hence states, counties, cities, irrigation districts may not be eager to secure many of the sites we now propose to pass into private ownership? . . . Let us so write this bill that fifty years hence they [the people] may have another chance."⁵

Senator Thomas of Colorado was more direct. He pointed out that there was no place for competition in the electric industry. Discussing the fear of water power monopoly, he stated that the merging companies "yielded to an inevitable law of commercial gravitation." As to the power monopoly "it is here," he said, "it has been here; it is going to stay here; and every additional water power plant will sooner or later, legislation to the contrary notwithstanding, take its place within the fold. It is inevitable . . . I have had the conviction for ten years, and that conviction is growing with every day of my life, that the one thing to do is to recognize the existence of this monopoly and let the states in their respective jurisdictions, take it over. If they are not big enough to control it, let the Government of the United States do it. I believe that when a monopoly exists and cannot be overcome it should be made a public and not a private monopoly. That to my mind is the only solution of the problem, and that it is coming I make no doubt."⁶

It was repeatedly charged and denied that the water power lobby was attempting to secure enactment of the bill while the nation was distracted by the fear of war. All liberalizing amendments were rejected by an average vote of 40 to 20, party lines forgotten. In a

final despairing speech Senator James A. Reed of Missouri declared: "I believed that the great potential force that batters and hammers this bill forward is after all that element which exists always and everywhere, which demands that capital shall have whatever capital wants, and that there is a force which exerts itself constantly . . . the bill proposes, in effect, to grant perpetual franchises to corporations that will enable them for all time to control the water power of this country."⁷

The bill passed the Senate on March 8, 1916, and went to the House. In the conference committee representing both chambers a deadlock developed and the 64th Congress died March 3, 1917, with the water power problem unsettled.

President Wilson, preoccupied with war and the 1916 presidential campaign, paid little attention to conservation issues. However, during the hectic Senate debate on the Shields measure Wilson responded to a letter from William Kent, who was opposing the bill. The President wrote: "I agree with you that it is better to let the water power run to waste than to settle the question of the use of it in the wrong way. I am watching the progress of legislation with a great deal of anxiety."⁸

President Wilson Intervenes. The 65th Congress was called in special session and on April 6, 1917, declared war on Germany. Three days later Shields again introduced his water power bill. It aroused all the old animosities. Senate progressives, knowing the House would reject the bill, declined to debate at length and passed the measure December 14 by the a significant vote of 48 to 18. Another hopeless deadlock was in prospect.

By this time we were in the midst of World War I. President Wilson, irritated over five years of futile congressional dissension and feeling it imperative to end the controversy, took a personal hand. At the suggestion of Congressman Kent, Wilson called a White House conference soon after the Christmas holidays in 1917. Some 25 members of such House committees as Rules, Interstate and Foreign Commerce, Public Lands and Agriculture attended. Wilson proposed a bill covering the disposition of power on all navigable rivers in and out of the public domain. Representative Lenroot suggested that a special water power committee be appointed from among the four committees to which all water bills, including the Shoals bill, would be referred. The chairmen present agreed to seek the support of their full committees. They succeeded and on January 9 the House created a special committee.⁹

A week later Speaker Bennett "Champ" Clark appointed a committee of 18 headed by Thetus W. Sims, Democrat of Tennessee, of the Interstate and Foreign Commerce Committee. The special committee was fairly well balanced between conservatives and liberals, but the presence of such veterans as Ferris, Raker, Lenroot, Haugen and Esch gave conservationists an edge. There was one conspicuous omission in the setup. The Rivers and Harbors Committee, which had been handling the Muscle Shoals project, was not represented. The chairman, John H. Small of North Carolina, bitterly protested this injustice and was told by Congressman Sims that the Chief Executive himself was responsible. Perhaps the reason for the exclusion was that the committee had always supported the private utilities and the Army Engineers.¹⁰

The Wilson Bill. President Wilson had now become better acquainted with the water power problem so the policy provisions in the bill he handed to Chairman Pou at the White House conference merit close attention. The draft had been prepared under the auspices of Secretaries Newton D. Baker (War), Franklin K. Lane (Interior), and David F. Houston (Agriculture) Baker became Secretary of War when his predecessor, Garrison, resigned, partly in protest against the water power doctrines of the conservationists. As mayor of Cleveland, Baker, an outstanding liberal, had sponsored the famous "Three Cent" municipal electric light plant and had strongly supported municipal ownership in addresses before national civic organizations. Lane, of San Francisco, was a liberal committed to conservation principles. Houston, although a conservative, was mildly progressive along those lines.

The actual drafting of the administration bill had been done by O. C. Merrill, chief engineer of the Forest Service, Felix Frankfurter, Harvard Law School, then on war duty in Washington, and Lathrop Brown, an ex-congressman from New York City. The bill was introduced by Raker of California, and hearings lasted from March 18 to May 15. Inquiry was made concerning specific situations on the St. Lawrence, Columbia, Colorado, Connecticut, and Tennessee rivers as well as bills to govern the development of all rivers. The electrical industry was represented by leading executives—E. K. Hall, of Electric Bond and Share Company; Calvert Townley, of Westinghouse, and lesser officials and lobbyists from all sections of the country. The public side was presented by the three cabinet officials who had produced the bill. Sir Adam Beck, chairman of the Hydro-electric Power Commission of Ontario, was invited to appear. He related the history

and accomplishments of that immense publicly owned and operated superpower system, then in its eighth year of operation.

Terms of the Administration Bill. President Wilson's bill was considerably amended by the committee, but it squarely established federal jurisdiction over hydroelectric power in the navigable waters of the United States. It stipulated that leases could be made either to private or public bodies for terms not to exceed fifty years. States, political divisions, and municipalities were given preference in case of a conflict between private and public applicants over a given site. A federal power commission, consisting of the Secretaries of War, Interior and Agriculture, was created to administer the leasing system. The newly erected commission was empowered to levy reasonable charges for use of water. A recapture clause was included which caused acrimonious debate as to its effectiveness. The bill also contained a remarkable provision empowering the federal government, on recommendation of the commission, to develop water power sites on its own initiative. Chairman Sims in his introductory speech emphasized this aspect. "This bill," he pointed out, "provides for unlimited development and operation of water power projects by the United States Government . . . those who believe in Federal Government ownership and operation of water power projects will find what they believe is provided for not only in principle but to some extent in detail in this bill."

The bill was reported on June 28, 1918, debated intermittently and passed by the House September 5 by a vote of 231 to 23; 174 did not vote.¹¹

Turning to the perennial claim of the power companies voiced by former Republican Speaker "Uncle Joe" Cannon, that the country's hydroelectric power would not be developed except on attractive terms to investors and promoters, Sims flung back this contemptuous rejoinder: "I am not wearing out my life here to try to provide a general law that is simply to attract accumulated capital, especially . . . when it is within the power of the Government of the United States to develop every one of these powers on its own account, at its own expense, and sell the power at cost, like the Hydroelectric Commission does in Canada."¹²

It was foregone that this radical House substitute for the Shields bill, fabricated by the White House, would receive a cold reception in the Senate. Senator Shields himself was ill but Fletcher of Florida at once moved that the Senate disagree without debate and call for a conference on the subject with the House. Despite heated objection

by Senator Cummins of Iowa and others, the joint conference was ordered, but not before Borah of Idaho, outdistancing Chairman Sims, had demanded outright public ownership and operation.

Borah For Public Ownership. Borah's speech went beyond both the Shields bill and the House bill, which were primarily leasing measures. But the incident indicated the growing divergence between the right and left wings of the conservation movement. Radical as the House bill appeared to a large majority of the Senate, it did not satisfy Borah, who was against the leasing system altogether. He reminded the Senate that during the discussion of the Hetch Hetchy bill five years before he had said, "I am in favor of absolute public ownership [of both water power and coal.] The leasing system is a delusion, so far as our natural resources are concerned." He insisted that power production was by necessity a monopoly and hence should be a public monopoly, pointing out that five holding concerns dominated the industry to such an extent that independent companies would have small chance to succeed in the business. He quoted extensively from Sir Adam Beck's testimony before the House special committee and commended Ontario Hydro as an example worth following. Questioned and challenged, this philippic was an exciting example of give and take. Borah argued the general superiority of public over private operation, citing the fact that in Ontario the average domestic cost was then only 2.5 cents per kilowatt hour compared with the United States average of 8.1 cents. Wholesale industrial power on the Ontario side of the Niagara cost \$8 per horsepower compared with \$18 on the United States side. Householders of Ontario alone were saving \$2,280,000 annually. Far from being insolvent, the Ontario system had large reserves. Within 30 years the municipalities would be out of debt.

Borah made an appeal still applicable to the West today. Citing the vast undeveloped water powers of the northwestern states, he said "It is the richest heritage that nature's God ever dedicated to a people . . . I feel therefore I can render no greater service to the people of that great northwestern empire than to help keep this heritage wholly and exclusively for the people as a whole . . . free from speculation and from private manipulation and gain. If we under public ownership can sell power for half what it costs under private ownership nothing is more calculated to bring people to settle our lands, to build homes and schools and manufactories, enrich our communities and enlarge our payrolls . . . cheap power will help do for us what it has helped to do for Canada; that is, it will bring invest-

ment and business and enterprise. I repeat, there is no domestic question of such vital and lasting concern to us.”¹⁸

The bill was sent to conference on September 23 *where it was to remain for five long months*. A glance at the Senate conferees appointed by Vice President Marshall explains this long delay, notwithstanding President Wilson's demand for speedy action. They were Senators Shields, Bankhead, and Nelson from the Commerce Committee, and Myers, Smoot, and Pittman from Public Lands; all were foes of the administration bill except Pittman. House conferees were Sims, Ferris, Lever, Esch, Sinnott, and Haugen, all progressives.

Rumors of heated discussion and deadlock kept coming from the committee room. The fact was that the Senators in particular were finding it difficult to overcome their pride and surrender the doctrine of states rights. But just when it appeared that this wartime Congress would, like the preceding Congresses, adjourn with the water power question unsettled, Chairman Sims announced to the House that a compromise had been reached. The report was brought up two days later with only one hour allowed for debate; both Sims and Esch recommended adoption.

At first blush it appeared that the House conferees had won. Federal jurisdiction was conceded. Charges for use of the waters and a “net investment” recapture clause, were retained as were many other conservation provisions.

Closer examination revealed, however, that as the price of peace on the water power front, the House conferees had accepted a joker which in practical effect would exclude federal government from jurisdiction over virtually all of the important water power sites of the nation. The Senate conferees with Bankhead in command had persuaded the House conferees to include the definition of navigability contained in the Shields bill. In layman's language this definition said that unless you could run a steamboat on a river in its natural state it was not navigable and therefore outside federal jurisdiction. The Tennessee River with Muscle Shoals, for example, would go to the states. Per contra, the Administration bill established federal control whenever a river could be made navigable by building dams, or otherwise. The unexpected appearance of the Shields definition in the conference report gave grave concern to weatherwise conservationists in the House, but curiously enough their cause was defended by that veteran conservative, James R. Mann, who denounced the provision as subverting the whole purpose of the bill. Cooper of Wisconsin agreed with Mann and deplored that a bill of such import-

ance should be held dormant for months, then reported within two or three days of final adjournment with no opportunity for fair discussion in an attempt to jam it through. "It is the old system which I have seen put in practice here ever since I have been a member of the House."¹⁴ Notwithstanding, the conference report was agreed to by the House on September 28, 1918, by a vote of 263 to 65, with 100 not voting.¹⁵

In the Senate the report was to be voted upon during the last day of the session which expired automatically at noon on March 4. It was so satisfactory to the power interests that the utility lobby was exerting all its influence for adoption. On the other hand, Gifford Pinchot, Phillip P. Wells, and Harry Slattery of the National Conservation Association, aware that 15 years of conservation was at stake, laid their case before liberal Senators. The power bill became the cause for one of the most sensational filibusters in American history—engineered by LaFollete of Wisconsin.

The LaFollette Filibuster. The war had ended. President Wilson had been at the Paris Peace Conference since December 18, but he made a quick return to Washington to be present at the close of the 65th Congress. He had arranged to go back to Paris on the day Congress adjourned. He did not want Congress in session during his absence. But several Senators wanted him to call a special session immediately to begin consideration of postwar reconstruction measures. During the closing days of this Congress both Houses were holding day and night sessions in a desperate effort to secure final action upon important matters. The Senate met for its last session at 10:30 a.m. on March 3, 1919, and remained in continuous session through the night with President Wilson in an adjoining room waiting to sign bills that were expected to pour from the hopper.

At 2 a.m. on March 4, Senator LaFollette took the floor and spoke for three and a half hours while weary Senators took naps on cots in adjoining rooms. In opening he gave the reasons for his action: "Eight great appropriation bills aggregating \$3,627,000,761 are waiting the action of this body. Back of these appropriation bills are conference reports on the coal and oil bill and the water power bill. Wrapped up within the carefully drawn provisions of those two measures there will be found the means to achieve the private control and ultimately the private ownership of the coal and oil and phosphates and other minerals now belonging to the people, and likewise the water powers remaining upon the public domain . . . no opportunity is allowed to examine the bills with any care . . ." LaFollette assumed

the responsibility for preventing the passage of these measures and declared "idle and foolish" the threat of a "frightful panic" that would result if they were not passed. At 5:30 a.m. he was relieved by Senator France of Maryland. France was relieved in turn by Senator Sherman of Illinois who continued to speak until nearly noon when Vice President Marshall sarcastically declared the Senate adjourned "Sine Deo" (without God) but the *Congressional Record* reports the traditional Latin form, "Sine Die" (without a day for reconvening.)

Whatever the judgment of history upon the wisdom of this filibuster, one thing remains reasonably certain. Except for it the compromise water power bill would have passed and, under the tremendous pressure of the moment, it might have been signed immediately. The water power policy approved by both President Roosevelt and President Wilson would have been ditched. The states would have taken over, and many priceless water power sites over the nation probably would have passed into private possession.

The Republicans Take Over. The congressional elections of 1918 gave the Republicans a majority of 2 in the Senate and 40 in the House. The Progressive or "Bull Moose" party had been disbanded in 1916. Theodore Roosevelt died January 6, 1919, and an ostensibly united Republican party continued conservative save for an aggressive minority of "insurgents" and conservationists. Congress was called into special session on May 19, 1919. Representative Frederic H. Gillett of Massachusetts was chosen Speaker of the House, and Albert Cummins of Iowa was made president pro tempore of the Senate with Vice President Marshall still in the chair. Wesley L. Jones of Washington was now chairman of the Senate Commerce Committee. Although a regular Republican, he was far more liberal than Shields or Fletcher. Lenroot had gone from the House to the Senate; in the latter chamber he was made a member of the Commerce Committee.

The House continued the Select Committee on Water Power. John J. Esch of Wisconsin was chairman, and Thetus Sims of Tennessee was the senior Democrat on the committee. Alben W. Barkley, Democrat from Kentucky who afterward became Vice President, was also a member of this committee. This shift of personnel was accompanied by a significant change. Up to this time the House had been more progressive than the Senate. From now on to the end of this history in 1933 the attitudes were reversed.

The water power bill, now H. R. 3184, with no essential changes, was reintroduced by Representative Esch and passed easily on July 1

with no roll call. In the Senate, Chairman Jones of the Commerce Committee reported back to the floor and after a brief debate on January 15, the bill was passed, 52 to 18 and again sent to conference.¹⁶ The measure that became the act of 1920 was now in hands of Jones, Nelson, Smoot, Myers, and Fletcher, managers for the Senate who had supported private power; and Esch, Sinnott, Taylor and Lee, mild progressives, for the House. Again, there was delay. Three months later, on April 30, 1920, the conference committee reported out a compromise with surprises aplenty.

High Points of the Compromise. The jurisdiction of the federal government over water power in all navigable rivers was affirmed. Ownership was vested in the United States. No more titles in fee simple and in perpetuity could pass to private hands. A federal power commission, consisting of the Secretaries of War, Interior, and Agriculture, would have authority to make 50-year leases for power development with preference to public bodies in the event of conflict with private companies. The commission also could propose to Congress the construction of hydroelectric stations by the government. A crystal clear definition of navigable waters in the compromise bill made certain that the term included all navigable rivers from source to mouth and that the presence of shoals or falls did not transfer jurisdiction to the states. The net investment or the actual cash spent on legitimate promotion and construction was to govern securities and rates charged. There would be no "watered stock."

The conservationists had won out on these provisions, but the utility and banking interests had succeeded also. The charges levied for use of water were not to be calculated on the value of the use but merely to pay for the expenses of the commission and cost of administering the act. Most prized of all was the tricky recapture clause making it so difficult and expensive for the government to recover possession at the end of 50 years that the conservationists charged the leases would be perpetual. Little noticed was the innocent minor part license clause, which waived the main provisions for a company desiring to use a stream only for a short time. It was to result in trouble later.

Senator Norris objected to a political commission. He said it should be permanent, independent, and not composed of cabinet members. The crux of the compromise was that a politically appointed, ill-staffed, and ill-financed commission would be authorized to grant leases, probably in perpetuity, to private monopolies on public waters worth many, many millions, for a pittance. Proponents of the bill held that

it was the only way to accomplish rapid and much needed development. Its opponents charged that this solution was a surrender to the utilities. It was both antipublic and indefensible.

The conference bill was a bitter disappointment to House veterans who had fought for the administration program. It was approved, nonetheless, on May 4, 1920, by a roll call vote of 259 ayes to 30 nays, with 137 not voting. Sims voted nay; Ferris did not vote.¹⁷ The Senate approved the bill on May 28 by a vote of 45 ayes to 21 nays, with 30 not voting. Among those voting against the measure were such liberals as Borah, Capper, France, Kenyon, Lenroot, Norris, Nugent, and Sheppard.¹⁸

President Wilson's Dilemma. President Wilson now faced a most difficult and embarrassing decision. He had both lost and won. Lenroot and others who had championed his cause had warned that if certain provisions (inadequate charges and faulty recapture, for example) were included the bill would be vetoed. A heavy contingent of his own party and the entire private power lobby was demanding his signature. On the other hand federal control had triumphed over states rights with ownership of water resources vested in the nation. There would be no more alienation of the title to power sites. The door was left open for public development.

When Congress adjourned on June 5, no word had come from the White House. There was much apprehension and breath holding on both sides until June 10, 1920, when it was announced that the President had signed the Federal Water Power Act. The decision proved wise. Its prime virtue was the establishment of public ownership of power sites. Without that, during the next 12 years, the title to all our most valuable sites would have probably passed to corporations. Knowledge of the power question as a matter of national concern gained during the first six years following passage of the act provided training for the struggle over Muscle Shoals from 1916 to 1933. Many leaders on both sides of the early fight continued through the battle for the shoals.

VII

WAR AND WATER POWER

The emergencies of World War I had a drastic effect on our national water power policy and resulted in an unexpected solution of the Muscle Shoals problem. By 1916 public opinion favored "the new attitude," as Theodore Roosevelt described it, toward social control of natural resources but understood that the old order had been able to forestall water power legislation.

At this juncture a new factor appeared—the nation's need of nitrates for explosives. For months Brigadier General William Crozier, chief of ordnance, had been gravely concerned over locating an adequate supply for explosives. We were depending on the vast nitrate beds of far away Chile. The only other available solution would be the fixation of atmospheric nitrogen at home. The uncertainties of imminent war, with France, England, and other countries drawing heavily on the Chilean supply, involved too great a risk. In October 1915 General Crozier recommended the construction of an air nitrate fixation plant but did not specify whether it should be a public or a private undertaking.

Air nitrate production was then a new industry. Scientists differed over the relative merits of the processes, both as to performance and quantity production. The question of the permanence of the processes was to plague Congress and the country for more than two decades. The nitrate industry and the power companies did not have the reserve capacity to meet war demands. The use of water power was desirable if costs were not to reach astronomical figures. It was generally recognized that Muscle Shoals afforded the most feasible site for an enterprise of this magnitude. Another frequently mentioned was Priest Rapids in the state of Washington. Power companies and the manufacturers of electrical equipment alert to the opportunity organized a newspaper propaganda campaign and sent a powerful lobby to Washington to press the Shields and Myers leasing bills previously mentioned.

None of the lobbyists were more active than the agents of the Alabama Power Company and James Mitchell, its president, and the representative of power companies in the far Northwest, the veteran promoter H. J. Pierce of Seattle. Mitchell, seeking the Shoals for

general utility purposes, had broken with his old partner Frank S. Washburn, the president of the American Cyanamid Company, who desired the power for his electrochemical corporation. Washburn and Worthington had severed their connection with the Alabama Power Company.

The war emergency gave a decided advantage to Washburn in the controversy since his company held patents on the cyanamid process, a proved method for large-scale production of air nitrates. General Crozier had early summoned Washburn, a technical expert in the cyanamid process, as a consultant on nitrate supply. The DuPont Company of Delaware was Washburn's chief competitor for the manufacturing job and for Muscle Shoals but its arc process required much more electric power.

There was great confidence that the new Congress would pass the Shields and Myers bills and that the President would approve them; if not, then some other action would be taken for the production of nitrates at Muscle Shoals. Washburn expected the latter. On January 22, 1916, soon after he quit working with the Ordnance Bureau as a consultant and six weeks before the House Military Affairs Committee made its report, the *State Sentinel* of Birmingham, Alabama, carried a lead article with the startling heading: "Government To Aid Cyanamid Co. Muscle Shoals To Be Built by Government and Cyanamid Company Bonds Endorsed by Uncle Sam. Cheap Fertilizer is Guaranteed to the Farmers by Government Price Regulation." The article said in part: "The Government is now considering the plan so fully and carefully proposed by the Cyanamid Company to have the Government build at its expense a great water power plant at Muscle Shoals which will cost some \$18,000,000 and permit the use by the Cyanamid Company of the power in the manufacture of nitrogen for fertilizer purposes in time of peace and for munition purposes in times of war, the Government to endorse the bonds of the Cyanamid Company to the extent of \$10,000,000 to enable the company to make the development."

The House Rejects Another "Cooperative" Scheme. About 20 bills were introduced in the new Congress to reorganize and enlarge the army and military affairs committees of both Houses. On March 6 the House committee reported its bill; Section 82 provided in general terms for a hydroelectric air nitrate plant and authorized appropriation of funds for construction by the government.

A group in both Houses which strongly opposed war profiteering in the proposed venture upset the policies that certain business interests,

as well as the Army Engineers, expected would be followed. Twelve members of the House Military Affairs Committee who subsequently took a prominent part in the disposition of the Muscle Shoals project during the 1920's backed Section 82 and its plan:

Democrats

James Hay, Virginia, chairman
S. Hubert Dent, Alabama
Kenneth D. McKellar, Tennessee
Percy E. Quin, Mississippi
James W. Wise, Georgia
Samuel J. Nicholls, South Carolina

Republicans

Julius Kahn, California
Daniel R. Anthony, Kansas
John C. McKenzie, Illinois
John M. Morin, Pennsylvania
John Q. Tilson, Connecticut
Harry B. Hull, Iowa

This brings us to the origin and nature of the plan thus endorsed. General Crozier had told the House Committee that fixation of atmospheric nitrogen was a reliable process, and that it would require cheap current and a power site of at least 100,000 horsepower capacity. He was opposed to government construction but testified that if no other solution were available the government itself should build "a huge plant." On the disputed claim that the cyanamid process was much cheaper than the arc process, General Crozier testified that cyanamid "requires less horsepower than the arc process but it requires other expenses in addition, so there is a difference of opinion between the proponents of the two processes as to which would be ultimately the cheaper." He confessed that he lacked knowledge necessary to make the choice."¹

Frank S. Washburn had proposed a "cooperative plan" for securing an air nitrate supply for war munitions and fertilizer in peacetime. The committee was friendly and obviously impressed. Their report explained the plan behind section 82. It proposed that the government build and operate a \$21 million hydroelectric power plant and deliver current to a private company. The company would finance and construct a \$24 million nitrate plant. Payment to the government for the power was fixed at 3 percent per annum on the investment in the hydro plant.

When the weeklong debate on the bill opened, March 17, Frear of Wisconsin attacked section 82. It was "an effort to put through Congress a proposal that would not stand the light of publicity." He quoted "disinterested" chemical authorities in support of his assertion that Washburn's cyanamid process was not the last word and it was by no means certain that he could produce nitric acid in quantity as

cheaply as he claimed and charged that "on his unsupported word Congress is asked to authorize an expenditure of \$21,000,000 with which to go into partnership with Mr. Washburn's Cyanamid Company."²

Chairman Hay, who strongly favored the Washburn scheme, anticipated trouble. He had further discussion of the nitrate section postponed until the last day of the debate when he proposed to devote two hours to discussing it. However, when Hay asked unanimous consent for the proposed debate, Madden of Illinois objected: "I think if we voted now we would get along better. Everyone knows what we are going to do. Let's take a vote on it now." The House agreed with him. The vote was taken without debate and a motion to strike out section 82 carried 203 to 198; only 30 did not vote.³

Senator Smith Proposes Government Ownership. Dates at this point in 1916 become interesting. On March 10, four days after the House Committee on Military Affairs report approved the Washburn partnership plan between government and private enterprise, Senator Ellison D. Smith of South Carolina dropped in the hopper a bill for outright government ownership, construction, and operation of a unified hydroelectric nitrate project. Its purpose, paralleling Washburn's, was to assure the production of nitrates for powder in wartime and for agricultural fertilizers in peacetime. This bombshell was submitted in the Senate only two days after that body had passed the Shields bill (authorizing the lease to private enterprise of waterpower resources outside the public domain) by a two-to-one vote. Senator Smith's bill seemed absurd, but war plays havoc with sedate convictions.

Smith was a cotton planter who had taken no part in the waterpower controversy. His move was a surprise. He was no advocate of public power, nor was he under political obligations to power companies. He was a positive, picturesque personality, aware of the importance of cheap fertilizer to the South. His lifelong activities in behalf of the cotton growers had earned him the nickname of "Cotton Ed." His bill, S. 4971, was destined to become Section 124 of the National Defense Act under which President Wilson ordered the construction of the Muscle Shoals project. At the Senator's request, S. 4971 was referred to the Committee on Agriculture and Forestry. Several members of the committee not only supported but strengthened the Smith proposal. Since they laid the groundwork for a public enterprise that attracted national attention, their names should be recorded.

Democrats

Thomas P. Gore, Oklahoma, Chairman
 Hoke Smith, Georgia
 Ellison D. Smith, South Carolina
 John F. Shafroth, Colorado
 Morris Sheppard, Texas
 Edwin S. Johnson, South Dakota

Republicans

James W. Wadsworth, Jr., New York
 Asle J. Gronna, North Dakota
 William S. Kenyon, Iowa
 George W. Norris, Nebraska

Committee chairmen often wield decisive influence on congressional legislation. It was fortunate for public operation advocates to have Senator Gore, a pronounced liberal, head the committee. Senator Norris in particular, as well as others in the Senate, were to decide the fate of Muscle Shoals.

While fertilizer was uppermost in Senator Smith's mind, other Senators were more concerned over waterpower. They were keen to ascertain whether the pending Washburn cooperative plan was not actually the old Muscle Shoals scheme in disguise and whether it was connected with Cotton Ed's proposed. Hence Washburn was the first witness called. Kenyon of Iowa questioned him closely about his power company connections. To Kenyon's astonishment, Washburn denied any connection with the Alabama Power Company. He had resigned lately, "within a fortnight," on the day, to be exact, when Senator Smith introduced his bill.

Washburn stated that his sole interest in Muscle Shoals was to obtain power for nitrates. He wanted "every bit of it," he said. When he disclaimed any knowledge of the Smith bill, the Senator hastened to explain the purpose and origin of his plan. "I want to say that in introducing this bill my attention had never been specifically called to the Muscle Shoals or any other water power in the country . . . I want to make this further statement that I have introduced this bill for bringing out and determining whether or not it is feasible for the Government to go into this business itself for the purpose of developing this ingredient without any regard to any private individual or any water power, anywhere, or anyplace. I simply wanted to get the fact that this is feasible and can be enacted into law . . ."⁴

The Senator said that before launching his plan he had consulted the Assistant Secretary of Agriculture, Carl S. Vrooman, a pronounced liberal who strongly approved the idea. At Vrooman's direction, Francis G. Caffey, solicitor for the Department of Agriculture, had drafted the bill.

Origin of Washburn's Proposal. Washburn testified that he had

consulted War Department officials, chiefly General Crozier, and had talked with Secretary Houston and others in Agriculture. Many plans had been considered. At first he had urged that the government guarantee the bonds for his nitrate plant and take a mortgage on the property but this plan was abandoned in favor of having the government furnish the power while private capital would construct the plant. After four months of study, War Department officials expressed themselves as favoring his plan but remained uncommitted. The Department of Agriculture did not express its opinion.

Senator Norris asked many questions on water power, especially the feasibility of Washburn's locating a nitrate plant in Ontario to take advantage of cheap power costs. He developed the information that Washburn's process was, as Washburn put it, "covered by a cloud of patents—100 of them I think." Use of the cyanamid would be controlled by Washburn's patents.⁵

Senator Smith introduced Dr. Thomas H. Norton, of the Bureau of Foreign and Domestic Commerce, who gave the committee extensive technical information. Norton testified that from German chemical engineers he learned that if Germany had not put nitrate plants into operation the year preceding declaration of war, she would have had to sue for peace. Dr. Norton thought the nitrate industry should be developed in the United States; he avoided the public-or-private plant issue. Dr. Leo H. Baekeland, a consulting chemist, also testified that fixation of atmospheric nitrogen was feasible though the process needed improvement. He advised that the government sponsor an experimental plant. When Senator Sheppard of Texas inquired if government ownership was a good policy, Baekeland replied: "That would be one way of solving the problem of our unfortunate situation, but this country up to now does not seem to have grown up to the condition where it can run as profitably as a private enterprise such a vast project."

The committee heard from R. F. Brown, who represented both the National Farmers Union and the National Grange, and who stated they were interested in nitrate development because of the prospect of low-cost fertilizer. He had no objection to government operation but thought that private interests would be powerful enough to prevent it. His organizations wanted the government to enter the field as a regulating force in a "competitive enterprise" of some sort because they feared that if they got out of the hands of the Chilean nitrate monopoly they would get into another one in the United States.⁶

The Senate Committee Reports Favorably. Convinced by the tech-

nicians that air nitrate production was practical and impressed by Dr. Norton's statement that Germany would have lost the war without advance air nitrate production, the committee endorsed the Smith plan. In its report on March 30, 1916, it urged immediate action. "The committee feels that any further investigation would not only be a waste of time but a dangerous delay." The basic principle of the bill, that of exclusive government ownership and operation, was not only retained but strengthened by the addition of a new section insisted upon by Senator Kenyon: "Sec. 7. That this plant or plants provided for under this Act shall be constructed and operated solely by the Government and not in conjunction with any other industry or enterprise carried on by private capital." The committee made one important change. The final draft authorized the President, instead of the Secretary of Agriculture, to designate and withdraw the necessary sites.

In exactly what way surplus nitrates would provide the promised cheap fertilizer was not made clear. Nitrates must be mixed with other materials to make a fertilizer ready for spreading. Was it anticipated that the government would manufacture the complete product and sell it to dealers or consumers? Or, would it sell the nitrate ingredient to private fertilizer mixing companies? Likewise, would the government sell surplus electric power direct to consumers or dispose of it to private utilities for distribution to ultimate users? The decision would be left to the Secretary of Agriculture.

The point is vital and remains a matter of heated controversy. Let us examine the start of it. Section 5 of the Smith bill read: "That the products of such plants shall be subject to requisition by the Secretary of War or the Secretary of the Navy for military or naval purposes and any surplus not so requisitioned may be sold and disposed of by the Secretary of Agriculture under such regulations as he may prescribe." The committee left the section intact except to change the phrasing from "shall be subject to requisition" to the words "shall be used." While the section gave the Secretary of Agriculture the option of wholesaling both power and nitrates to private enterprise, it also authorized him to make the government its own manufacturer and selling agent. The possibility brought from the conservatives as much condemnation as the idea that the government build the plants—heresy enough, even as a war emergency.

The measure precipitated the first truly major debate ever held in Congress over "putting the Federal Government into the power business." Strong men of equal sincerity were at variance, represent-

ing the conflicting ideologies of their day. All were conscious that the war emergency was forcing the government to set a precedent of momentous consequence.

The Senate Battles Over Public Power. The first skirmish in the Senate came on March 30, 1916, when reports of committees were received and bills introduced. Senator Underwood, a Smith bill opponent, wanted the nitrate plant located at Muscle Shoals in his own state, Alabama, and he had proposed an amendment to the national defense bill as a step in that direction. Knowing the Smith bill would be reported March 30th and go on the calendar to await its turn, he had given notice of his intention to speak at length on his amendment on the same day. The time would be immediately after the morning hour. By this maneuver Underwood would have his day in court before the Smith bill could be reached for discussion.

To the alarm of both Underwood and Smith, Senator Saulsbury of Delaware, alert to the interests of the DuPont Power Company, during the early morning hour read to the Senate a letter addressed to Secretary of War Baker by Pierre DuPont, president of the DuPont Company. DuPont's letter transmitted a bill authorizing the Secretary of War to give his company a 50-year lease on a power site to be selected by the Army Engineers. The lease would be for the purpose of constructing a complete hydroelectric, power-nitrate plant to supply the government with nitrates. The company would furnish all the capital, and profits would be fixed by the Secretary of War. After 50 years the government could reclaim the properties at fair value. By this move the DuPont proposal was the first to capture the attention of the Senate and the press. Realizing this, Kenyon of the Agriculture Committee demanded an immediate reading of the Smith bill. A little later Smith made the official report on his bill.⁷

Saulsbury's action made Senator Underwood angry when he did not get the first break, either in the Senate or the newspapers. He vehemently charged the DuPonts with maintaining a powerful Washington lobby to acquire a choice power site and to prevent government production of nitrates. The DuPonts denied the charge but that was the last heard of their offer.

Underwood's amendment, intended to steer the new plant to Muscle Shoals, was as vague on essentials as was Section 82 of the House bill. Despite the adverse recommendation of the Agriculture Committee, the Senator wanted an investigation made by the Board of Engineers for Rivers and Harbors with the approval of the Secretary of War. The

Army Engineers were to select a site and a nitrate process, estimate costs and report back to Congress.

Underwood was opposed to exclusive government operation. Once military needs had been supplied, he would have the plants "rented" to private enterprise, the nitrates sold to private manufacturers, the power sold to companies who would use it in the manufacture of fertilizer. Instead of Smith's proposal to build three or four small plants costing a total of \$15 million, he would have a single large plant capable of developing 130,000 horsepower of electric energy. The power, he said, would be sufficient for the annual production of 180,000 tons of nitrates by the cyanamid process, approximately equal to two thirds of Germany's production rate. An investment of \$50 million would be needed. Underwood noted that the Army Engineers' investigation showed that this could be done at Muscle Shoals.⁸ With this as an opening, the real battle was joined a week later, April 7th, when Smith introduced his bill as an amendment to the national defense bill. The debate took a major part of the Senate's time until adoption of the amendment, with some changes, on April 14th.

All the basic issues of governmental policy considered in the foregoing chapters were again brought into sharp focus. We can best recount them and recreate the atmosphere in which the discussions took place by direct quotations from spokesmen for each side.

After an explanatory speech by Senator Smith, Hardwick of Georgia led the attack against the bill. He hated to oppose his good friend from South Carolina, he said, "yet this amendment contains elements of public ownership, of governmental participation in private business, that render it impossible for me to lend it my support unless it is materially modified from its present shape . . . it is just a question of Socialism, pure and simple; that is all." Later, chiding Underwood, Hardwick declared, "The Senator from Alabama ought to apologize to Debs and every other Socialist that he has ever criticised during his whole political career. I am grieved to see a Democratic Senator, nurtured in the faith of Thomas Jefferson, and one of my best beloved friends, make such a mistake. If Jefferson were here and could have heard this proposition of the distinguished Senator from Alabama I think he would have left this chamber in disgust; and if he could, although dead, hear it now he would turn over in his grave in holy horror."⁹

Senator Henry Cabot Lodge of Massachusetts was also opposed to government production of either water power or nitrates. He maintained that a sufficient supply even for war purposes could be had from

private coke ovens. "I have not myself the slightest doubt that in that way, or through water power, you can secure all you want if you will let private enterprise alone and allow it to engage in the undertaking, and you will get it cheaper than in any other way." He held that both the Underwood amendment and the Smith bill were backed by "what may be called the Muscle Shoals scheme." He followed with a violent attack upon Washburn and inserted in the record several pages from Moody's Manual of Railroad and Corporation Securities of 1915, disclosing Washburn's power company and other corporate connections. The attack on Washburn was a rejoinder to Underwood's attack on the DuPonts. "I suppose a corporation is wicked in Pennsylvania or Delaware and that a corporation is good in Alabama," he said sarcastically.¹⁰

Sutherland of Utah, though usually opposed to legislation calling for Federal control or ownership, nonetheless attacked the Smith proposal as exceeding the functions of government: "I want to see this government operated as a government. I do not want to see it degenerate into a business concern. I do not think it was in the contemplation of the framers of it that it was to go into business either to monopolize it or in competition with its own citizens. It is utterly unfair to do it . . . Why not let private capital embark in this business? Why not leave the door open to private capital instead of closing it by this sort of legislation and let the matter develop as other commercial and manufacturing matters develop?"¹¹

Husting of Wisconsin, a Democrat, led for the affirmative. Husting was not impressed by the alleged iniquity or unfairness of government competition with its citizens in a matter of this kind, nor was he allured by Washburn's cooperative scheme. "I am opposed to this partnership business, and I am for the amendment with the understanding that it is to be run as a government institution and be conducted as a public enterprise. I trust that if we are going to build a dam for the purpose of manufacturing powder and nitrates, we will hang onto that dam and use it in time of peace in the best manner and for the best purpose to which we can put it." He noted that the operation of a small government powder factory had demonstrated actual costs of making powder. As a result, "the price of powder manufactured by the private concerns had dropped from about a dollar a pound to about 50 cents a pound." Private concerns held a monopoly of patents on air nitrate manufacture. The Shields bill was still pending; if passed it would permit private capital to monopolize water power,

and "then we turn over to them the land, the water and the air for their sole use and benefit."

In his argument against monopoly, extortionate military costs, and war profiteering, Husting struck a note that if supported by others would have a powerful effect on the outcome. Passage of the Smith amendment would avert these evils, he said. "I cannot see anything wrong about this proposition, I like it particularly well because it is the government itself that is going to do this and is not going into partnership with anybody else. That will insure us from the danger of putting our money into a power plant and after having it built throw it into somebody else's lap for the purpose of enriching not the people of the United States who built it, but the people who are fortunate enough to get a permit from the government to use government property built with government money."

He felt the time had passed when the cry of socialism was effective. "It is rather strange to find that whatever legislation is proposed which promises to make for the public advantage—that is, equal taxes, for instance—or which promises to lighten the burdens of the already over-burdened people, the opponents of the bill invariably denounce it as 'socialistic' as though that alone answered all arguments in its favor and destroyed whatever great progress was intended."¹²

Kenyon, a Republican for the Smith amendment, followed Husting: "I believe in the Government doing this work, and building and operating the plant, because I believe that the Government should make its munitions of war. I voted for the armour plate bill on that theory. The profits should be taken out of war and there would be less demand for war in certain quarters." Turning to the fertilizer feature, he said: "The question of the conservation of our soil is as important a question as the people of this nation have to face. And so I am inclined to vote for a government plant to make nitric acid in war and fertilizer in peace."

Kenyon had dealt with the Muscle Shoals problem ever since he succeeded, in 1911, to the Senate seat vacated on the death of Dolliver. Kenyon reviewed the history of efforts to develop the Shoals, disagreeing with the Army Engineers who supported the Washburn-Worthington partnership plan previously described. Hence he strongly opposed Underwood's proposal that Army Engineers select the site. "We might just as well write into the amendment that this plant is to be located at some particular place, and that is Muscle Shoals," he said. He denied prejudice against the site but urged that selection be made

by an unbiased independent board not committed in advance to deal with private interests.¹³

Senator Walsh of Montana ridiculed the claim that a government plant would prevent private capital from investing in the nitric acid business. After declaring himself in favor of the Smith amendment, he said: "I submit, sirs, that it is a business proposition that could receive countenance nowhere in any aggregation of businessmen, that when you have the very elements of the thing you should turn these elements over to someone else and allow him to utilize them and then buy the product from him. Furthermore, Mr. President, I am glad to vote for this amendment upon exactly the same principle as that upon which I voted for the erection of an armour plate factory; that is, sir, to take as far as we reasonably can the profits out of the business of war . . . I would have the Government go in and utilize these great power sites for the fixation of atmospheric nitrogen so that no one would be tempted to go into it in order to make money out of it."¹⁴

The temper of the Senate on the Smith proposition was shown by the vote on an amendment to strike the words "and useful in the manufacture of fertilizer." The amendment (by Hardwick) was rejected 47 to 25, with 25 not voting. The opponents of the plan then directed their efforts toward permitting private industry to share in the benefits of the enterprise. Abandoning his drive for an investigation, Underwood introduced another amendment authorizing the Secretary of War to lease both plants, or to lease the hydro-electric power plant alone to private parties "when not needed for the manufacture of explosives." He was defeated on this and also on a proposal authorizing the Secretary of War to contract with some private concern for a process of air nitrate production.¹⁵

Norris For Government Project. Norris of Nebraska in several short speeches supported the principles of government ownership and operation of the proposed plants since existing processes of air nitrate production were not perfected, he suggested the government employ scientists to work out a new and better process of its own. "Mr. President, this is a system that is rapidly developing, changing, and improving. It may be that it will be unnecessary for the Secretary of War to purchase any patented processes from scientists who are in the employ of the Government."¹⁶ Two years later President Wilson ordered the construction of an experimental plant for this very purpose. Feasibility of the cyanamid process was to plague the Congress throughout the 1920s.

Thus, after weeks of debate, bickering, and heated colloquies, the

Smith amendment was adopted, 42 to 22, with 31 not voting. The vote shattered party lines and even the usual distinctions between progressives and conservatives. Among the yeas were such conservatives as Myers, Overman of North Carolina, Saulsbury of Delaware, and Underwood himself. Voting against the measure were Senator Harding of Ohio, who became President four years later, Senator Curtis of Kansas, elected Vice President in 1928, and Senator Wadsworth of New York, all conservatives, and two outstanding progressives, Borah of Idaho and Chamberlain of Oregon, who had resented the intrusion of the Smith amendment into his defense bill.

There were many conflicting provisions between the House "Military Affairs" bill and the Senate "National Defense" bill. The conference committee attempting to reconcile these differences was composed of Senators Chamberlain, Beckham (Kentucky), Broussard (Louisiana), DuPont (Delaware), and Warren (Wyoming); and Representatives Hay, Dent (Alabama), Kahn (California). The committee revamped the entire bill, rewriting many parts. The first report was rejected and returned to the committee for further alteration before its labors were accepted and the bill adopted.¹⁷

The nitrate section enacted authorized the President to proceed with the undertaking at his discretion. It resolved the knotty problems of location, selection of a process, and the construction and operation of the plants by turning the plants over to him. Government ownership and operation was assured and made exclusive. The repugnance to both houses of partnership with industry or to a water power grab was overcome by retaining the exact text of the sentence which the Senate Agriculture committee added to the Smith bill. The sentence read: "The plant or plants provided for under this Act shall be constructed and operated solely by the Government and not in conjunction with any other industry or enterprise carried on by private capital."

The final text on disposition of surplus—power and nitrates—read as follows: "The products of such plants shall be used by the President for military and naval purposes to the extent that he may deem necessary, and any surplus which he shall determine is not required shall be sold and disposed of by him under such regulations as he may prescribe."¹⁸

The wide open authorization implied in this compromise gave neither side a victory. The President could, after supplying military needs, devote the plant either to the production of power or to the manufacture of fertilizer. A conservative President could sell the surplus power wholesale to a private utility or to a fertilizer company.

Underwood conceded these eventualities to Hardwick shortly before final action on the bill.³⁹ The chief consideration that moved Congress to put the federal government into hydroelectric power production was, then, not fertilizer requirements of the nation's farmers, but the dire need of nitrates for war. Congress put its trust in the federal government as the best means of guaranteeing a prompt supply without war profit to any private enterprise.

Representative Longworth Is Scornful. The views held by the ultraconservatives on this venture were best summed up in an extremely sarcastic speech made by Representative Longworth of Ohio before the final vote in the House. Because he was Republican floor leader from 1923 to 1925 and Speaker of the House from 1925 to 1931, his attitude profoundly affected the disposition of the Muscle Shoals project, which was constructed under the very law he roundly denounced in 1916. Longworth questioned the sincerity of the bill's advocates in attacking the fertilizer feature, ridiculing it as a move to bring relief to the farmers. He announced that he would vote for the conference report to assure reorganization of the Army, then added:

"There is one provision in this report, however, that I regard as possibly the most obnoxious and unjustified piece of legislation that has passed Congress in my experience. I mean the so-called government nitrate plant. Unfortunately the parliamentary situation is such that we must vote the whole report up or we must vote it down. We must take the bitter with the sweet, if we are to get any of the sweet, and I am compelled, therefore, at the risk of the permanent impairment of my digestion, to stomach this nitrate proposition, but not without voicing, if a useless, at least an emphatic protest.

"What is this so-called nitrate proposition? It is a scheme to spend \$20,000,000 of the people's money absolutely uselessly, so far as they are concerned, and the inherent vice of it all is that this money is being taken from them under false pretensions. In the name of the national preparedness we are going to spend \$20,000,000, and this is but an entering wedge, for eventually it will cost millions more if carried out upon a scheme which has nothing whatever to do with national preparedness, upon a scheme which, when advocated on its real merits, has been repeatedly repudiated by Congress . . .

"I have heard it said that the Administration insisted that this scheme should be included in the bill. If that be true, it was due, I am sure, either to ignorance of the facts or else to misrepresentation of the facts by those directly interested . . .

"The American people will not benefit by this scheme. Not a soul

will benefit except a few highly efficient captains of industry who know exactly what they want and who at this moment are doubtless laughing in their sleeves at the ease with which they have pulled the wool over the eyes of a docile Congress.

"This incident is not closed, gentlemen. It will rise to plague you in the not-far distant future. The people are going to demand an accounting for this and other reckless drafts upon their Treasury. Be well assured that the 'pork barrel' will not smell sweeter because of the admixture of its contents with fertilizer."²⁰

Longworth was right in believing that "efficient captains of industry" with an eye to the main chance might, under the terms of the act, have achieved their purpose at the hands of a complacent president, but it soon turned out that they did not. Furthermore, the future Speaker either ignored or was totally blind to the significance of the electric power provision. But he was not alone in lack of vision. A few years later liberals and conservatives alike were astonished at the project which grew out of dimly foreseen, rapidly changing conditions affecting the national welfare.

But Was It Constitutional? In addition to the wisdom of the so-called nitrate section, the constitutionality of the bill was questioned. The right of the federal government to lease and regulate the use of water power sites had been debated in nine sessions. War or no war, it is not hard to imagine the rise in temperature caused by a proposal that the government develop and operate one of the sites. The United States Supreme Court in the 1913 Chandler-Dunbar case had declared invalid the ancient legal doctrine that potential power in a river belonged to the riparian owner.²¹ The court further asserted the right of the national government to lease or develop power in navigable waters, but the old debate over constitutionality and states rights proceeded as though there were no Supreme Court.²²

The argument, old as the Republic, was a typical set-to between strict and liberal constitutionalists. Worthy of note, however, are the pleas of progressive statesmen to get action on twentieth century economic and social problems within the framework of an eighteenth century constitution. Legalistic Borah, though favoring the nitrate proposal, thought the constitution would have to be changed; he said, "We have only such power as the people give us through the constitution."²³ Borah was joined by Smoot, Lodge, Oliver of Pennsylvania, and others, especially Sutherland. When Smith cited the welfare clause as a legal base for his scheme, Sutherland retorted: "If the Senator from South Carolina thinks that is a substantive grant of

power, then the Senator and I have no common foundation upon which we can conduct an argument.”²⁴ Clapp of Minnesota, a Republican, firmly believed the welfare clause a substantive grant of power, and started the following exchange on the floor:

Mr. Clapp: “. . . I want to put my support upon a ground that cannot be questioned . . . I think the sooner we reach the plain proposition in this matter that this government can do those things essential to the development and welfare of all without doing them in a roundabout way, the better it will be for all concerned . . . There is no more question in my mind of the right and power of the American people, under the federal constitution, to develop a fertilizing product, if it is wise . . . than it is to do any other of the thousand and one things we are doing today under government control, regulation and through the government itself.”

Mr. Borah: “Under what provision of the Constitution would the Senator from Minnesota assume to do that?”

Mr. Tillman: “The general welfare clause of the Constitution is broad enough for me and it is deep enough, too.”

Mr. Clapp: “. . . Under the broad proposition that there is no warrant for the burdens of government to be assumed by a people unless those forming that association called ‘government’ can develop their moral and material welfare under the instrumentality of that association.”

Mr. Owen: “I believe in a liberal interpretation of the Constitution. I believe the Constitution ought to be construed in the light of being intended as a servant of the people in their organized capacity. My only regret is that we could not go further along these lines; but certainly, even for a strict constructionist, this proposal in the conference report could not meet with any sound objection.”

Mr. Owen, an Oklahoma Democrat, reached this legal conclusion after an eloquent outburst which illuminated the whole conflict between outgrown legalisms and human necessities.

VIII

BUILDING THE MUSCLE SHOALS PLANTS

The President did not have long to wait to use his authority to construct plants, under the National Defense Act of 1916, for the production of atmospheric nitrogen to be owned and operated "solely by the government." When on April 6, 1917, the United States declared war on Germany, all the grave possibilities foreshadowed in the debates on the nitrate section of the Act became reality. No one knew how long the war would last. Since military authorities estimated it would continue into 1920 or even beyond, calculations for supplies were made on that basis.¹

It was at once apparent that the procurement of nitrates for explosives to supply the American Expeditionary Force would be a stupendous and difficult task. Four months after entry into war, General Pershing cabled that France had a serious shortage of Chilean nitrates and that "to avoid calamity the United States must not only furnish powder and explosives for all of its own forces but must supply about half of the French requirements." The situation became grave.²

The task of obtaining nitrates was assigned to Bernard M. Baruch, a member of the New York Stock Exchange serving as head of the raw materials section of the War Industries Board. He succeeded in thwarting speculators from cornering the world market in nitrates and in stimulating coke production for the duration of the war. He readily agreed with the Ordnance Board that the government must have an independent source of supply and gave the Muscle Shoals project his enthusiastic endorsement. Baruch estimated that one-fourth of our nitrate requirements must come from these plants. Before the war ended, he revised the figure to one-half.³

The Selection of a Power Site. For nearly two years the government had given serious attention to the necessity of developing atmospheric nitrogen but with the declaration of war the decision was forced. A process had to be chosen and a water power site selected.

In the interim the Chief of Ordnance, General Crozier, had scientists studying the various methods of nitrogen fixation and experts sent to Europe in 1916 to investigate air nitrate processes. Secretary of War Baker had also requested the National Academy of Science and the American Chemical Society to appoint a joint committee to

study and report on the most economical method of obtaining a nitrate supply. This committee, acting swiftly, recommended on January 20, 1917, that the government purchase enough Chilean nitrate to meet requirements for at least one year, build a plant to purify and convert coke oven ammonia purchased from private concerns, and construct a large hydroelectric station to supply power at cost to private companies for fixation of atmospheric nitrogen.⁴

By the time the reports were made, the likelihood of the U. S. being drawn into the war had become more threatening. The crucial nitrate problem remained unsolved. Opinions among authorities assigned to the task were sharply divergent. They differed not only on technical questions but on water power sites and the respective parts government and industry should play in meeting the emergency.

To settle the disputes, President Wilson, on January 15, 1917, appointed the Secretaries of War, Interior, and Agriculture to consider and report on the selection of water power sites. The three cabinet officers at once launched an investigation of possible eastern and southern sites remote from the seaboard. Nine locations were found. On March 9th, Secretary of War Baker created a nitrate supply committee of 15 men to recommend a plan of action. General Crozier was chairman, but the committee included representatives of military and scientific organizations as well as private business.⁵ On September 28th the President announced that the first nitrate plant would be located at Sheffield, Alabama, near Muscle Shoals.

Meanwhile, the declaration of war forced the nitrate supply committee to make a hasty decision based upon incomplete study and inadequate knowledge. It was a vital decision because German scientists had perfected the secret Haber process requiring a comparatively small amount of electricity for the fixation of atmospheric nitrogen. On this side of the Atlantic the General Chemical Company owned the patents for a "modified Haber" process developed scarcely beyond the laboratory stage. In April 1917 the company had tendered use of its patents to the government plus the assistance of its technical staff under certain conditions. With further experimentation it was thought the process might be capable of producing air nitrates in quantity, as the Germans were doing. The American Cyanamid Company owned the cyanamid process, which was already in large production, but required vast quantities of cheap electricity. The nitrate supply committee recommended May 11th acceptance of the General Chemical Company's offer and that the War Department build a large plant, preferably in southwest Virginia. The com-

mittee further recommended postponement of the decision to use the cyanamid process and water power development "until the plants . . . are in operation or until further need arises."⁶ Only one concern, the American Cyanamid Company headed by dynamic Frank S. Washburn, had a process and the know-how capable of meeting this emergency. Negotiations were promptly begun. Several offers were made and rejected. Finally the company agreed to form a subsidiary, the Air Nitrates Corporation, to construct a great air nitrate plant at Muscle Shoals. Electricity was to be supplied by a steam plant because it was unlikely that a power dam could be built before the end of the war. The contract was signed on November 16, 1917, and within a week engineers were on the ground inspecting the Muscle Shoals site for the subsequently famous Plant No. 2.

A considerable supply of energy was needed for the construction of the Muscle Shoals project. Fortunately, the Alabama Power Company had in operation the Gorgas steam plant on the Warrior River, 90 miles southeast of the shoals. It was interconnected with the company's statewide transmission network. Its capacity was only 25,000 kilowatts, but the company agreed to build at government expense an additional 30,000 kilowatt unit and a 110,000 volt transmission line to connect with a substation at Muscle Shoals. The system was ready for operation the following May. The transmission line was to play an important part in the Muscle Shoals story.

Events now moved rapidly. On July 21, 1917, a Nitrate Division was created in the Ordnance Department (Colonel J. W. Joyes was chief) and ordered to proceed with construction of Nitrate Plant No. 1. On August 10th the J. G. White Engineering Company contracted to build the plant. Construction started October 4. The government's frantic search for an economical air nitrate process was on. It was well understood that Plant No. 1 was to be a trial project.

In August the Ordnance Department was faced with a large deficiency in its supply of explosives and explosive material. Twenty days after the first spadeful of dirt had been turned for the experimental plant, the Ordnance Department warned Colonel Joyes that he must prepare to furnish an air nitrate supply far beyond all previous calculations.

President Wilson Orders Dam No. 2. Although a new steam power plant was authorized to supply energy for the Nitrate Plant No. 2, President Wilson on February 25, 1918, ordered construction of Dam No. 2 at Muscle Shoals. Dam No. 2 was to become Wilson Dam. The move was surprising because it was highly improbable that this

gigantic structure, nearly 100 feet in height and a mile in length, could be completed in time for war use. Dam No. 2 was the principal of three dams recommended to Congress by the Army Engineers Corps to harness Muscle Shoals for navigation and power purposes.⁷

Choice of the Muscle Shoals Site. President Wilson's decision to locate the nitrate plants at Muscle Shoals was severely criticized. He was charged with having disregarded his military and civilian advisers and of playing the game of Democratic Party politicians in league with the Alabama Power Company and other private interests that would benefit later. The criticism was based on the assumption that the plants were built only to supply nitrates for the war. The evidence discloses that the utilities and industrial interests did not get what they desired as a result of Wilson's decision. Care had been taken in its selection. In March 1917 Secretary of War Baker, Secretary of Interior Lane, and Secretary of Agriculture Houston, who had the responsibility of selecting the site, investigated possible sites in the southern states in the company of technical advisers, who also were sent to look into the possibilities of Niagara Falls, Keokuk, and other places.

In May the nitrate supply committee recommended that Plant No. 1 be located "preferably in south-western Virginia" but the Chief of the Nitrate Division, Colonel Joyes, found the narrow valleys of this region unsuitable. He suggested that General Crozier advise Secretary Baker that of the nine sites inspected four best filled the requirements—North Chattanooga, Nashville, Sheffield, and North Birmingham. General Crozier passed the recommendation on to Secretary Baker, giving North Chattanooga as his choice. Secretary Baker decided on Sheffield near Muscle Shoals and President Wilson approved his selection.⁸ Explaining his reasons for naming Sheffield, which meant Muscle Shoals, Secretary Baker said he advised the President that "it would be very much wiser to put this plant where, when we could build a dam, we would have hydroelectric power available ultimately . . . because of course we were looking to the fertilizer end of it as well as the munitions uses."

The great Plant No. 2 was located at Muscle Shoals for the same reason. The Secretary said he was aware that the chemical and physical processes then in use were experimental; that the future would bring great changes but in any event "any process is going to use larger or smaller amounts of power. Therefore power to a certain extent is at the heart of the problem. The damming of the Tennessee River at Muscle Shoals produces an enormous amount of

power and makes it possible for us on short notice to expand the production at Muscle Shoals. Any other place, using similar power, would be open to the question of immediate and rapid expansion.”⁹

At the time no explanation was given why Muscle Shoals was selected from among other sites recommended, and much was made of that fact. But there was no unsavory mystery. In the expenditure of many millions of dollars on the venture the President was trying to combine immediate production of nitrates with long-term national welfare. Besides power and navigation such conservation issues as flood control and soil conservation were acute problems in the offing. Muscle Shoals was the key to mastery of the entire river. Wilson had heartily championed conservation principles in his campaign speeches and Secretary Baker had come to Washington straight from the mayor's chair in Cleveland where he had established a municipally owned 3-cent light plant. All these things undoubtedly influenced the choice and led Colonel Joyes to testify “I think I might have been influenced in the same way if I had been working at it from the viewpoint of the Secretary and the President.”¹⁰

There was still another consideration. The War Industries Board in its prodigious task of equipping and maintaining an army was faced with a power shortage. The government had no generating stations of its own, and private power companies lacked sufficient surplus capacity. In one of its official reports, the board stated: “Among the many difficulties encountered during the war, having an important bearing upon the war program of the government, was that created by the exhaustion, soon after our entry into the war, of the reserves of central-station electric power in our principal manufacturing communities. This very naturally at once led to inability on the part of the public-utility companies to honor demands for additional power made by customers with contracts for war supplies of various character, and, as a consequence, threatened to interfere seriously with the production of the equipment and munitions needed for our forces on land and sea.”¹¹

With this example before him, Secretary Baker had good reason to make certain that the government in the event of another war would have its own power plant, capable of delivering, as he said, “enormous amounts of power . . . on very short notice.” The decision to retain possession of Muscle Shoals and start construction of Wilson Dam when opposition to public power was at a minimum was an act of high statesmanship. Time and the contribution of the Tennessee Valley Authority in World War II have justified the choice of the

Muscle Shoals site to say nothing of the fertilizer program and subsequent accomplishments of the agency. But for that decision there would doubtless have been no TVA.

Republicans Attack the Project. Having failed to prevent government development of Muscle Shoals, the Republican Party leadership embraced the first opportunity at war end to halt construction with the intention of transferring the entire project as mere scrap to private interests as soon as possible. The congressional elections of 1918, held only six days before the armistice, gave the Republicans control of the 66th Congress that met the following May 19. The House of Representatives immediately set up a Select Committee on Expenditures in the War Department. Representative William J. Graham of Illinois, a conservative Republican, was chairman. Graham also became chairman of subcommittee No. 5 on Ordnance, which held extensive hearings and on May 18, 1920, made a sensational report on the Activities of the President and the War Department in their efforts to build and operate nitrate plants. The other two members of the committee were Albert W. Jefferis (Republican) of Nebraska and Finis J. Garrett (Democrat) of Tennessee.

The inquiry, alleged to be nonpartisan, was confined to the question of honesty and efficiency in the expenditure of public funds. The hearings and the findings of the chairman and his partisan colleague, popularly known as the "Graham Report," disclosed that they were equally concerned over the policies pursued and the precedent set in building the Muscle Shoals plant.¹² The report charged that there had been gross waste of money in constructing the Muscle Shoals plants, and the evidence sustained the accusation. Cost-plus contracts commonly produce such results. That much of the report was well within the purview of the committee. The committee, however, was not authorized to consider the question of policy though its report stated categorically that there was "no national necessity at any time which required the War Department to embark upon the vast building program for the manufacture of nitrates for war purposes"; that the purchase of an advance stockpile of Chilean nitrates plus the output of privately owned coke ovens would have been sufficient; and hence that the government's expenditure of an alleged \$116,000,000 on this program produced no nitrates prior to the Armistice, and contributed nothing toward winning the war.¹³ The report charged that the administration had by collusion merely carried forward the schemes of Washburn, Worthington, and the Alabama Power Company for the development of hydroelectric power at the

Shoals, and further that the commercial production of electric power and fertilizer by the government was a gross violation of American principles.

Chairman Graham recommended that Plant No. 1 be kept in stand-by condition, that Plant No. 2 be leased to a private concern, and that no further funds should be expended or appropriations made in connection with the Muscle Shoals plants including Wilson Dam "until some policy as to the future of said plants be determined upon by Congress."

The Democratic member of the subcommittee, Representative Garrett, wrote a minority report—a much more candid and restrained document that included many germane facts ignored by the majority. It showed the Graham report to be a reckless, biased performance motivated by party politics. Garrett deplored that the President, the War Department officials, and the distinguished civilian scientists and engineers who were responsible for devising the nitrate program should be accused of well-nigh criminal folly, and that many of them should be accused of corruption and negligence in its execution. Further, Garrett pointed out that frequently the record did not support Graham's intimations and allegations. While agreeing with several of the findings, Garrett held that such wholesale condemnation without a word of commendation was shameful and unjustified.¹⁴

Garrett also pointed out that Graham's statement about the plants having produced "no nitrates prior to the Armistice" and his opinion that there was "no national necessity for building the plants" were misleading, after-the-event conclusions. He cited testimony proving that in 1917 all military and civilian authorities believed that war would last much longer than it did, that we had agreed with our allies to place 80 to 100 divisions in the field, meaning that three to five million soldiers would be in France by 1919 and 1920, when it was expected the United States would make its real offensive. The country was obliged to supply not only a vast army with food, ammunition, medical service, and all equipment but also to aid its allies. By 1919 the war program would require around 373,000 tons of ammonium nitrates unobtainable from any other source. For that reason air nitrate plants were a necessity unless we intended to have an army at the front without ammunition.

Garrett contended that the administration was no more to blame for having two unused nitrate plants on its hands on Armistice Day than for the fact that there were two million men in training who were

never sent overseas or that Congress itself was considering another draft. Moreover, he added, Graham had conveniently ignored or scouted such factors as the shortage of ships and the extreme danger from German submarines or warships which might blockade the Panama Canal and interfere with the Chilean nitrate supply.¹⁵

Garrett criticized his Republican colleagues for injecting the issue of government ownership and operation into the inquiry, asserting that the issue had not been authorized by the resolution establishing the committee. Therefore he would make no recommendations or comment, and would leave the disposition of the Muscle Shoals plants to Congress. His was a wary tactic. A large majority of the members of the full select committee were hostile to public ownership; they included some of the Democrats who approved Garrett's report.

While the Graham committee was hard at work on its investigation, the Wilson administration introduced in the Senate and House (November 17, 1919) a bill to complete construction of Dam No. 2 and establish permanent government operation of the entire Muscle Shoals project. This move no doubt prompted Graham's vehement attack. The fact that the report was not made until May 29 on the eve of the 1920 presidential campaign was evidence enough of political motivation.

A \$100,000,000 Investment. Since a precedent of basic national importance was at stake, the attention given or not given Muscle Shoals in the platforms of the two great parties is of interest. The Republican National Convention at Chicago on June 10th declared: "Conservation is a Republican policy. It began with the passage of the Reclamation Act signed by President Theodore Roosevelt We denounce the refusal of the President to sign the Water Power bill passed after ten years of controversy." No mention was made of Muscle Shoals. Wilson signed the Water Power bill that very day. Ten days later the Democrats at San Francisco resolved in favor of inland waterways, reclamation, and flood control, side-stepping both Muscle Shoals and public ownership.

When the final or Lame Duck session of the 66th Congress met on December 6, 1920, the Republican majority proceeded to put in effect Graham's recommendations. The maneuver during the last hour of the expiring Congress succeeded in a fashion almost as sensational as the LaFollette filibuster of the previous year.

The Graham report correctly stated \$100 million as the amount of money already spent on the Muscle Shoals venture. There was \$12 million in the experimental nitrate and steam plant at Sheffield and

another \$70 million in Plant No. 2 and the steam station at Muscle Shoals. More than \$13 million had been spent on Wilson Dam. Alabama Power Company had spent \$5 million under its contract for an additional generating unit and transmission line.¹⁶ Wilson Dam was half done. To complete it would cost \$12 million. Graham estimated the additional cost of the administration program to be \$28,238,750. The Republican high command, directing Graham's activities, had placed the majority of the well-informed members of Congress in an embarrassing position. The public was not likely to cheer scrapping the project at war prices or leasing a nitrate plant heralded as a boon to national defense and agriculture. The \$100 million figure loomed like the handwriting on the wall at Belshazzar's feast.

The sundry civil expense appropriations bill reported on December 29, 1920 contained no item for Muscle Shoals. Joseph W. Byrns of Tennessee proposed an amendment to include \$10 million to continue work on the dam. In the ensuing debate Graham and Garrett summarized the contents of their respective reports. The amendment was defeated but the margin of only seven votes revealed considerable Republican opposition to the party leaders' position on the shoals.

In the Senate a like \$10 million amendment promoted by Underwood was approved by the appropriations committee after a single hearing. It was debated and passed the Senate on February 5, 1921, by a majority of nine.¹⁷

The bill went to conference where both sides stubbornly refused to recede. The Senate was determined to finish the dam, the House just as firmly opposed. Further hearings were ordered by Chairman James W. Good; further debates and another conference produced a second deadlock. The House remained adamant and even on the last legislative day again rejected the Senate amendment by a roll call vote, thus jeopardizing the sundry civil appropriations bill. Thereafter, to keep many important agencies of the government functioning, the Senate receded after midnight and recessed at 1 a.m.¹⁸ President Wilson signed the bill the next day.

The vast construction operations at Wilson Dam were suspended in April and not resumed for more than a year. Behind the endless bickering over items of expenditure or which scientific or engineering advice was sound, the dominant issue actually was who would have control of the enormously valuable water power of the Tennessee River, the government or private industry. Occasionally the real issue

came to the surface as in a colloquy between Senators Smoot and Underwood, when Underwood insisted that the generation and sale of electric power would be "a successful business proposition." Smoot agreed but added, "What we are objecting to is that the government of the United States should go into it. The Keokuk Dam was built by private capital and I cannot see why this should not be built by private capital just the same as the Keokuk Dam."

Underwood was quick to take advantage of the admission: "The Senator makes the real issue . . . that is, that he does not want the government to own and control this dam, and in order to keep the government from doing that he would waste \$17,000,000 of the government's money." After McKellar of Tennessee reiterated Underwood's charge, Smoot replied: "There have been \$14,000,000 expended on it and the Senator from Utah is perfectly willing to let the government sell and take the loss now."¹⁹

Engineer Hugh Cooper's Opinion. A far different concept of the government's financial and economic responsibility in framing a Muscle Shoals Policy was advanced by Colonel Hugh Cooper before Senate and House committees in 1921. His testimony was frequently quoted in debates for years afterwards. He was then in private practice and was retained as consultant to Chief of Army Engineers Lansing H. Beach, who was in charge of building the Wilson Dam. Cooper, a conservative Republican, flatly told his inquisitors that on principle he was opposed to government in business but that Muscle Shoals was the unique exception. His reasons can be summarized as follows:

It would be economic folly to halt work at Wilson Dam after so tremendous an expenditure. Suspension of construction for two or three years would entail a loss of around \$4 million.

Muscle Shoals was basically a power and navigation project. It should not be used to any great degree for the production of fertilizer. Air nitrate processes were in flux and would change.

The shoals was the key to power development in an area of 60,000 square miles affecting seven states. Only the government could develop this power. Private capital would not touch it, the determining factor being that the government could obtain money at 5 percent interest while private capital would have to pay more.

Fully developed and with generators installed, the dam would cost \$50 million. Its capacity would be 550,000 horsepower, including 100,000 horsepower of firm power available the year around and

450,000 horsepower of secondary or intermittent power. All this could be used in 10 or 15 years. The revenue to the government on a 5 per cent interest basis would amortize the investment in 50 years. The Federal Power Commission should have "absolute control" of the sale of power with fair and effective regulation and proper management by the Army Corps of Engineers. Ultimate consumers of the power would save \$10 million a year on their power bills.²⁰

PROGRESS UNDER WILSON

The Republicans stopped construction of Wilson Dam because section 124 of the National Defense Act posed the threat of government ownership and operation of the entire Muscle Shoals properties. In January 1919, following the armistice, President Wilson appointed Arthur G. Glasgow as "fixed nitrogen" director, with instructions to prepare a plan for disposition of Plant No. 2. Glasgow, a mechanical engineer and successful businessman of wide experience in developing large gas, chemical and other undertakings, strongly opposed government in business. He first sought to lease the nitrate plant to a private company, and spent many weeks in calling on electro-chemical officials. They were not interested.

The alternative was to attempt to sell the \$70 million plant as war scrap (Colonel Cooper later testified that \$3 to \$5 million might be offered) or continue government operation. The latter course was taken. In cooperation with the staff of the Ordnance Department and in consultation with the Secretary of War a plan was perfected and presented to the Secretary in October, 1919, accompanied by a draft of a bill putting its recommendations into effect. Secretary Baker then called in Representative Julius Kahn and Senator James W. Wadsworth, Jr., Republican chairmen of the House and Senate Military Affairs committees. He requested them to introduce the bill because the nitrate plant was primarily designed for national defense and logically should be handled by the military affairs committees. Both gentlemen informed Mr. Baker of their opposition to this bill but courteously agreed to introduce it "by request." Kahn dropped his copy in the hopper on November 1st and had it referred to his own committee, where it was pigeonholed forever. Wadsworth, knowing he was placing himself in the ironical position of fighting a bill that bore his name, did the generous thing. He requested that the bill be referred to the Committee on Agriculture and Forestry, well known to favor its principles.

A Government Corporation Is Proposed. The most significant provision of the administration bill, aside from the provisions for government production and sale of nitrate products and electric energy, was the proposal for the creation of the United States Fixed Nitrogen

Corporation, a government corporation which was to operate the shoals properties, including Wilson Dam when completed. The corporation was to be independent of all other government agencies. Supervision and control would be vested in a board of directors appointed by the Secretary of War who was to become ex officio chairman. As to the other members: "The Secretary of War may appoint any officers of the War Department or any other person as a director of the corporation"

All capital stock in the corporation was to be purchased by the United States. As a starter, an appropriation of \$12,500,000 for preferred 5 percent stock was authorized. Within restrictions set out in the act, the corporation was to have broad powers commonly exercised by private corporations to insure efficiency and liberty of action. It was directed to maintain laboratories and continue experimentation in the production of fertilizer and chemical products. The corporation was authorized to "sell any or all of its products not required by the United States to producers or users of fertilizers or to others." This later applied to sale of Wilson Dam power. Finally, "by direction of the President," the corporation was authorized to operate Wilson Dam. The bill was in the nature of an amendment to the National Defense Act; its constitutionality was assured as a matter of national defense.¹

As expected, the administration proposal met with a friendly reception in the Committee on Agriculture and Forestry. Chairman Asle Gronna of North Dakota was a liberal Republican strongly in favor of government production of both fertilizer and power. He repeatedly warned the Senate that exhaustion of soil fertility was rapidly making low-cost plant foods a farm issue in the West as well as the South and East. Beside him sat "Cotton Ed" Smith of South Carolina and six other Senators who, like him, had been members of the committee in 1916 when it inserted the government operation provision in the National Defense Act. After adequate hearings, the bill was reported, without comment, to the Senate floor for passage on June 1, 1920, four days before adjournment.

The Senate Amends and Approves. . . Debate on Senate approval of the Wadsworth bill and on the House move to stop construction of Wilson Dam began December 30, 1920. Underwood led the fight for the administration plan in the Senate. In the House, Chairman Good in his opening speech on the sundry civil appropriations act warned, prophetically, "There is another item which has been omitted which we shall hear much about before we conclude the bill." He referred,

of course, to the \$10 million for Wilson Dam. His statement threw the House into a discussion of the Wadsworth bill and public ownership.

Wadsworth, in the Senate with Smoot, led the fight against the measure under consideration, describing it as "our first experiment in state socialism of the purest kind." It would kill the private nitrate industry, he said, adding, "I think it is about time to pause in our efforts toward tyranny and oppression in this country and decide how much freedom is to be preserved to us."² Smoot's Democratic colleague, Senator King of Utah, declared the venture was "not only unwise but it will create a dangerous precedent" leading perhaps to the nationalization of all industry. He held the functions thus assumed by the government were "clearly within the field of private endeavor."

Proponents replied that it was not socialism to preserve and operate the expensive government plants for the national defense nor to help relieve farmers from the exactions of the fertilizer trust. To those who inveighed against "government competition with its citizens," John Sharp Williams (Democrat) of Mississippi, responded, "The government should have somewhere a producer of these things that should furnish a productive element to stop and check private profiteering." Here was the "yardstick" idea which TVA later made well known—a government operation to measure private industry costs and prices to consumers.

In both Houses it was taken for granted that a corporation was the best type of operating agency. A war Congress was familiar with government corporations created to exercise functions usually performed by private companies. Even Chairman Good, in commenting on the principle in floor debate, said, "You have got to apply to government affairs the same business principles that a businessman adopts in his affairs if you want the government to succeed in business." It was not creation of the corporation but its control by the War Department that aroused Senate hostility. The friendly attitude of the Army Engineers toward the Alabama Power Company and Washburn's Cyanamid Company was discussed once more.

Said Senator Kenyon: "I confess a good deal of suspicion about any bill that originates around Muscle Shoals It is probably a great water power, and I am not averse to doing that [furnishing power for the nitrate plants] but here are the cyanamid interests and the Alabama Power Company and all other interests around Muscle Shoals that arouses one's suspicions. Talk about a lobby! You cannot

go to your office, you cannot get through the corridors anywhere without having some of these lobbies talking to you about bills in Congress."

Lenroot was equally direct. During his 12 years in Congress, he said, special interests had been at the doors of Congress "asking for the appropriation of millions of dollars for the development of Muscle Shoals for their benefit." The Army Engineers had cooperated with them. Therefore, in view of this record, "this legislation should make it clear that officers of the Ordnance Department shall not control this government corporation." No objection was made to this peremptory demand then or throughout the session. Chairman Gronna agreed and announced that he had prepared an amendment giving appointment of the board and full control to the President. Later the amendment was unanimously adopted. For full measure, financial control was taken from the Secretary of War and vested in the Secretary of the Treasury, the Senate once more agreeing with Wadsworth that "the Army has no business taking part in such an enterprise."^a

No Repeal of Section 124. The case for army control was not aided when the powers conferred on the corporation were examined critically. Back in 1916 the most controversial feature of the famous section 124 had been "that the plant or plants provided under this Act shall be constructed and operated solely by the Government and not in conjunction with any other industry or enterprise carried on by private capital."

The pending corporation measure, drafted in the War Department, reversed this decisive policy and provided that in its operation "the corporation shall be free from the limitations or restrictions embodied by the Act of June 3, 1916 and shall be subject only to the limitations and restrictions of this Act." The language, of course, opens the door to "partnerships" in which government builds the dams for navigation and utilities get the electric power.

Senator Lenroot made the most of this startling repeal. Apparently it came as a surprise to Smith, Gronna, and even Underwood, one of the Senate's best constitutional lawyers. "Does the Senator from Wisconsin as a lawyer say that this proposed corporation can enter into partnership with any private corporation in its operation?" he inquired.

"They can," Lenroot answered. "The power is expressly given in two instances in the bill. Paragraph M provides that the corporation is empowered 'with the approval of the Secretary of War to lease to other persons, firms, or corporations any of its properties not used or needed by the corporation or to enter into agreements with others

for the operation of such properties.' This would apply to power as well as fertilizer production." Lenroot contended that under these vague, broad powers the corporation could even lease the plant to the American Cyanamid Company. Underwood surrendered, saying that he and others favoring the measure would vote to eliminate the provisions. Gronna explained that he and a majority of his committee favored the principle of the bill and had reported it out speedily under pressure from the War Department and farm organizations. He reserved the right to amend it on the floor.

Senator Smith, to whom government operation was the most important section, was astonished. He explained that he and Gronna wanted the corporation to have broad powers but not that broad. "I stand here today and say that my intention is to strike from this bill any possible power to be delegated to this government corporation that would give them the right to lease or call into co-partnership with them any of these interests we have been discussing here . . ." Gronna catalogued these interests as "the manufacturers of fertilizer and steel, in the by-products of coke, in explosives and in powder." The provisions were stricken from the bill.⁴ The financial structure of the plan evoked an encounter quite as bitter as the question of control. The bill authorized \$12,500,000 initial capital with which to start operations; the money was to be obtained by the sale of 150,000 surplus tons of Chilean nitrate, thus relieving the Treasury of the outlay.

Wadsworth, with some justice, ridiculed the financial set-up as "most sketchy" and demanded the exercise of "business principles." While the steam plant would furnish power at the beginning, ultimate success was dependent on cheap water power when Wilson Dam was completed. The Senator insisted on a capitalization that would cover the whole project. He pointed out that \$100 million had already been expended. Admitting that wartime prices and conditions had made this excessive, he proposed to halve the cost and issue \$50 million in bonds "on which the corporation would be required to pay interest annually at the rate of 5 percent." If and when Wilson Dam was completed the corporation would issue an additional \$40 million in 5 percent bonds. Also, he would require issuance of \$20 million of common stock, and if at the end of any fiscal year the corporation was unable to pay interest on its bonds, "it shall forthwith cease operations and shall not resume until authorized to do so by the Congress." The restriction was severe since ventures of this kind, public or private, require a few years to develop markets before showing a profit. Wadsworth's proposals failed adoption.⁵

The method for the production and sale of fertilizer also troubled the Senators. The corporation was empowered "to sell any or all of its products not required by the United States to users of fertilizer or to others." Lenroot charged: "There is not a line in the bill protecting the farmer in securing fertilizer from the operation of the Muscle Shoals plant." The corporation was not compelled to operate the plant, and, if it did, the entire product could be sold to producers, meaning fertilizer companies. This feature and an omission which permitted retail prices to be fixed by manufacturers and private dealers were corrected by an amendment worked out on the floor. Senator Smith proposed "sales preference to those persons engaged in agriculture." Lenroot added that retail prices could be regulated by the government corporation when it sold nitrate wholesale to private dealers. Harris added that retail prices should be "reasonable." Such discussion and revision continued for eleven sessions of the Senate until January 14, 1921, when the bill passed by a roll call vote of 34 to 29. The measure was sent to the House and referred to Chairman Kahn's Committee on Military Affairs where it died. It was debated in the House, however, since it arrived when that body was in the process of halting construction on Wilson Dam. Arguments, pro and con, closely followed the line of discussion in the Senate.⁶

At this critical juncture in the Muscle Shoals fight, President Wilson, absorbed in his campaign to induce the United States to join the League of Nations, suffered a tragic paralytic stroke on September 29, 1919. It is probable that he never knew the details of the Wadsworth-Kahn bill. From the conservationist's point of view the administration plan devised by Glasgow and approved by Secretary Baker was sound and praise-worthy on four counts. The unity of the project was assured. The steam and nitrate plants were to be kept intact or rehabilitated and used for extensive chemical experiments on fertilizers and munitions. Wilson Dam, when completed, would assure cheap power, essential in another war emergency.

On the other hand there was no guarantee in the original draft that farmers would get the full benefits of low cost fertilizer even if manufactured by the government although some farm organizations had hopefully endorsed the bill. Nor was there any assurance that ultimate consumers would get low cost electric service. Any surplus power could be sold wholesale at the switchboard, and Secretary Baker's testimony clearly showed he approved that policy, trusting

future regulatory bodies to enforce reasonable rates. There was no thought of providing in the administration bill or in the debates in Congress a network of government transmission lines to get power to the farms, as the rural electrification program has done. Although too liberal for the conservatives, the measure that died in the House committee could hardly have established either a power or a fertilizer "yardstick" to measure private costs.

REACTION UNDER HARDING

The Harding Administration set out to end the Muscle Shoals controversy immediately after the inauguration in 1921. The Democrats had been blocked by Congress in their efforts to continue government operation. The plants on the Tennessee River were now to be turned over to private corporations and the "trend toward socialism" would cease, or so it was planned.

The uppermost issue in the presidential campaign of 1920 had been the proposed entry of the United States into the League of Nations. The American people were not prepared for the step by tradition or experience. They were war weary and irked by unaccustomed restrictions on their daily lives and business activities. The Republican battle cry of "back to normalcy" was comforting, promising relief and avoidance of foreign entanglements even as George Washington had advised. Another slogan, "less government in business" was music to industry. The Republicans had won a smashing victory.

All realistic historians emphasize the alarm of American capitalists at the extent of control over their activities by the government during the war even though it was a matter of military necessity. Fast-growing industrial and financial super-corporations had bitterly resented interference with their freedom of action stemming from the various regulatory measures of the Roosevelt and Wilson administrations. In some fields government operation was an actual threat. Now was the time to terminate this "invasion of their constitutional rights." "Back to normalcy" and other catch phrases were promptly interpreted as a license to return to the unrestricted liberty of the nineteenth century when one could operate almost as he pleased.

The vigorous young electric industry had succeeded the railroads as a major factor in politics and government, local, state, and national. The superpower age, inaugurated by long-distance transmission, was in sight. The utilities had supported the Republicans except in the South where they supported most Democrats with equal zest and success. In 1919 the National Electric Light Association, launched a political and propaganda campaign against public ownership and effective regulation. So extensive was the campaign that 15 years later, after an exhaustive investigation, the Federal Trade Commission

reported to Congress: "The record establishes that measured by quantity, extent and cost, this was probably the greatest peace-time propaganda campaign ever conducted by private interests in this country."¹

With powerful backing from business and utilities it was easy and natural for a party commander on the national level to give orders. But it was not so easy for individual Senators and Representatives from many of the states to obey. Agricultural America remembered the promise of cheap fertilizer when government plants would be operating at Muscle Shoals. The great national farm organizations backed the Democratic proposal for continued government operation. To deliver the giant project to private interests might be political suicide in many states. Here we have one primary cause of the split in the ranks of both parties.

The nation was becoming increasingly conscious of the menace of destructive floods. The demand for inland navigation was still strong. The need for erosion control and soil conservation had become more and more obvious. Electric rates charged by private companies were unduly high as shown by the experience of 2,500 municipal plants and public ownership and operation of the superpower system of Ontario Hydro.

A start had been made on government construction of Wilson Dam so why not continue harnessing the entire river to meet flood control needs, provide inland navigation and electric power? Two things were obvious: The needs were there and the most economical and efficient method of meeting them was by a single, unified operation, as recommended in Senator Burton's Inland Waterways Commission Report of 1908, and as clearly indicated by modern techniques. Second, it was certain that an enterprise of this magnitude and vision was beyond the province of private enterprise. Neither risk capital nor the States would undertake a task that clearly belonged to the federal government. However, it was equally certain that if some private utility was not permitted to install its own generators and sell electricity over its own transmission and distribution lines, the whole project would be opposed.

Congress was also faced with responsibility for protecting the government's investment. More than \$100 million had been spent, at war-time prices to be sure, but even if so discounted the values were still large. Muscle Shoals was both a peacetime and a wartime project. To scrap the project or to pass over to a private company the only money making part of the whole project, power generation, and aban-

don fertilizer production would enrage farmers and offend progressive citizens.

Such were the deeper forces the Harding administration faced in disposing of Muscle Shoals when the 67th Congress was called into special session on April 11, 1921. Few persons in either the executive or legislative branch of the government had any real comprehension that the issue was a major, precedent-making matter. To most it was a vexatious local problem. In Washington high society a derisive reference to Uncle Sam's "white elephant" invited popularity and a laugh.

The Administration Invites Bids. The move toward riddance was begun nine days before Congress met in special session. Under orders from Secretary of War John W. Weeks, the Army chief of engineers, Major-General Lansing H. Beach, wrote the officers of several power companies a letter which was given nationwide publicity. It read, "The Secretary of War has directed me to ascertain what arrangements can be made to derive a reasonable return upon the investment if the United States completes the dam and hydraulic power plant at Muscle Shoals, Tennessee River. If you are interested, I would be pleased to discuss the matter with you at this office at the earliest date that may be mutually determined. It is desirable to develop the matter and to come to a conclusion at as early a date as possible."

Secretary Weeks doubtless expected a speedy response. Only a few weeks previously a Republican Congress had roundly denounced government power development and halted construction at Wilson Dam by denying an appropriation; Congressional leaders had plainly indicated their desire to have private capital take over. The most likely bidder would be the Alabama Power Company, alone or in cooperation with adjacent companies, which would offer to lease the dam for 50 years under provisions of the Federal Water Power Act passed the year before. Whether the utilities would themselves desire to finance completion of the dam or sign a lease after the government had completed the work would be a matter for negotiation.

The Utilities Decline to Bid. Suprisingly, no proposals were received. The following February General Beach recounted his disappointing experience to the House Military Affairs Committee. He testified that he had received long letters from Thomas W. Martin, president of the Alabama Power Company, and James B. Duke, president of the Southern Power Company (operating in the Carolinas,) and a joint letter from top officials of four companies operating in Tennessee and Georgia.²

On May 28th Thomas Martin had written that his company had long been interested in acquiring the Muscle Shoals site but could not finance it. He could not make an offer until he knew when the site would be available and at what cost. He warmly desired to cooperate with the government and work out a solution. On June 2nd the Tennessee and Georgia company officials replied that "private capital could not afford to undertake the Muscle Shoals water power development, nor make investments to use its output on the basis of the present plans."

On June 24th James Duke informed the General that his company could do nothing. Transmission distance was too great, and the market was not large enough to absorb the power. "In my opinion, the United States government could not, at the present time, complete the Wilson Dam and hyroelectric plant and obtain a reasonable return on its investment With every desire to assist the government in a solution of its problem at Muscle Shoals, I am forced by the facts to the conclusion that the government should leave the permanent work as it is and salvage the construction plant. The government should then wait until labor and materials render possible the completion of the project at reasonable cost and until there has developed some nearby use for power at Wilson Dam at an 80 or 90 percent load factor."³

Officials of the companies complied with General Beach's request and appeared at his office for consultation. The General's forthright comment on these interviews at the hearing shows strong resentment. He stated that he had told the utility officials that their attitude was exactly the same as if he had proposed a horse trade. He explained that he had expected concrete propositions from them, not excuses. Representative Fields, Democrat of Kentucky, was incredulous: "They did not submit a proposition at all?" The General replied: "No, sir, they advised me I was wasting my young life in trying to secure propositions."

In answer to another question from Fields, General Beach said that he understood Mr. Duke was then closely connected with the Air Nitrates Corporation, the subsidiary of Washburn's American Cyanamid Company, which had built Plant No 2. He summarized Duke's position thus: "He wrote me a letter stating that the whole project at Muscle Shoals was very inadvisable and foolish on the part of the Government. That is practically a synopsis of his letter."

Colonel Hugh Cooper crisply told the committee a few days later "I have read those utility company statements; I think they were

made with a deliberate attempt to bear the market; that is what I think of them all. They were not made in good faith. I want to say that with special emphasis."

The meaning of Cooper's charge is clear. The utilities and their financial backers, believing themselves the only bidders and that the political situation was well in hand, were out to obtain Muscle Shoals power at far below its actual value. Their feigned indifference came to a sudden end on July 8, 1921, when a proposition was received that surprised Wall Street, cheered the entire nation, brought bids from utilities and others for the shoals properties, and became the subject of heated controversy for the next three and a half years. It stamped "Muscle Shoals" on the American mind so vividly it has never been erased.

CHAPTER XI

HENRY FORD ARRIVES

The proposition that upset the expectations of the New York and southern utility and banking executives, complacently waiting for the Harding administration to come to heel and permit them to acquire Muscle Shoals on their own terms, was made, surprisingly, by Henry Ford, the automobile manufacturer.

On July 8, 1921, Ford wrote General Beach this offer: First, if the government would complete Wilson Dam and construct Dam No. 3 20 miles above it as planned by the Army Engineers for river regulation and power production, he would lease both dams for 100 years and repay the Government's investment plus 4 percent interest. Second, he would pay \$5 million for all the properties built and owned by the government in connection with the project. Third, he would "operate Nitrate Plant No. 2 to approximately present capacity in the production of nitrogen and other fertilizer compounds." He would sell the fertilizer at not more than an 8 percent profit. He proposed that a board controlled by representatives of the farm groups be empowered to inspect his books. Further, he would furnish free electric power to operate the navigation locks at the dams, and keep Nitrate Plant No. 2 in prime condition ready for use by the government in the event of another war.

General Beach at long last had his desired "proposition." Front-page newspaper headlines carried the news to the country. Mr. Ford's proposal, with its resulting political significance, was enthusiastically received by urban workers and middle-class folk.

Next to Thomas A. Edison, Ford was the most famous and admired inventor and industrial genius of the day. At a time when automobiles were a rich man's luxury, selling at from \$1,000 to \$5,000 and more, Ford had produced a reliable poor man's car—the famous "Model T"—which sold at \$650. He also manufactured low cost farm tractors and trucks. On America's streets and country roads, Model Ts equalled the number of all other makes combined. In addition Ford was known as a great humanitarian. He installed a profit sharing plan that distributed millions of dollar to his employees. He set a minimum wage of the then unheard of rate of \$5 a day. In 1916, during the First World War, he chartered a passenger vessel and at his own expense had

taken a group of distinguished Americans to Europe in an effort to bring representatives of the warring nations into a conference to end the conflict. The "Ford Peace Ship" failed its purpose but nonetheless touched the heart of humanity.

Ford's Dream. In making his offer Ford had mixed in something besides cheap fertilizer to relieve American farmers although the objective also had great importance. He intended to build additional dams on the Tennessee River above the shoals. The dams he proposed would generate power for several kinds of industries he intended to promote. A million men would be employed; preference would be given to veterans.

Without doubt Ford was sincere. He knew the possibilities of cheap water power. He had harnessed the Little River Rogue in Michigan, why not the Tennessee? It was a magnificent dream to round out his career. The new industrial center would be greater than the one he had already created. He could apply his philosophy of reducing costs through improved mass production on a greater scale, sell at a modest profit per unit, and depend on vastly increased sales for success. His adherence to this principle had been the key to his amazing success as distinguished from the prevailing practice of pricing high and selling less. It was well understood by the masses and was another reason for his great popularity. Here was a reformer among capitalists—the common man's friend. Here was the popular idealist who, if given Muscle Shoals, would serve the public better than any other.

But Ford was also a stern individualist. He was a farm boy who had risen to dizzy heights through his own efforts. He resented government interference and had no faith in public ownership and operation. His failure, like that of other bidders for the shoals, was to realize that the project involved twentieth century social needs and policies of national import far beyond the province of private capital or individual initiative, however able and well meaning the individual might be.

Ford Meets Secretary Weeks. General Beach handed the Ford letter to his chief, Secretary of War John W. Weeks, who referred it for study to the legal and scientific staffs of his department and likewise to the newly established Federal Power Commission of which Weeks was ex officio chairman. The Secretary was no novice struggling to master the complicated problem in hand. As an active member of Hornblower and Weeks, the Boston banking and brokerage firm, he knew utility finance before his election to Congress. As a

member of the House from 1905 to 1913 and of the Senate later, he was acquainted with conservation problems and water power legislation. When Ford came to Washington on January 11, 1922, for consultation with Weeks, there must have occurred a highly interesting encounter between the veteran statesman and the impetuous industrialist. Ford had stated that the Muscle Shoals issue as "a simple affair of business which should have been decided by anyone within a week."¹

When examined, the Ford plan of resolving this "simple affair" turned out to be an astonishing proposal. As a "horse trader" Ford was the equal, if not the superior, of the utility executives designated by General Beach. Secretary Weeks strongly objected to several basic provisions in the proposed contract; some of the objections Ford accepted, others not. He returned home and on January 25 submitted a modified offer. Among other changes he proposed to complete Dam No. 2 and build Dam No. 3 according to the Army Engineer specifications instead of leaving it to the government. Weeks forwarded the second offer to both Houses on February 1, accompanied by a critical analysis. The document concluded with a neatly turned paragraph to the effect that it was Congress' responsibility to decide whether Ford's inadequate and uncertain guarantees to produce fertilizer "were of sufficient importance to justify the proposed departure from the present policy of the law in regard to dealing with the water power resources of the nation," as set out in the Water Power Act of 1920.²

Weeks objected to a 100-year lease, to the absence of any provision for regulation, to sale of the Warrior Steam Plant and transmission line to Ford, to the government's paying the cost of flowage rights at Dam No. 3, to selling the nitrate plants and other property for \$5 million, and to the cost amortization scheme. Ford refused to yield on these points with one exception: if the government could secure a higher interest rate than the 4 percent he proposed, he would permit the surplus to be retained instead of having it applied as a reduction on his obligation.

To meet Weeks' objections that his first offer lacked guarantees for continuous production of fertilizer if found unprofitable, that the government could not recover in case of default, and that recapture of the water power at the end of 100 years was uncertain, Ford made changes and additions in the second offer, but in such equivocal language as to raise questions whether his company was legally bound by them. These changes are noted at length in Weeks' report to Congress.³

Ford's final offer contained two main divisions; one dealt with the dams and the other with the nitrate plants and other properties. Summarized, it agreed to the following 12 points:

Dam Construction. In compliance with plans and specifications of the Chief of Engineers, to complete Wilson Dam and build Dam No. 3 with money advanced by the government.

Leases. To lease both dams for 100 years.

Amortization. To return to the government the money advanced for dam construction plus interest at 4 percent. Into a sinking fund the government was asked to create Ford would make semi-annual payments of \$3,505 on Dam No. 3 and \$19,868 on Dam No. 2, totaling \$46,746 annually. These amounts, invested by the government at 4 percent compounded semi-annually, at the end of 100 years would yield \$49,071,935, the estimated cost of the dams and equipment.

Maintenance. To pay \$55,000 annually as maintenance and operating costs of the dam and navigation locks and to furnish annually 200 horsepower of electric energy for the locks, to be operated by the government.

Property to be Purchased. To pay \$5 million for both nitrate plants with their steam generating plants, the Gorgas steam plant and transmission lines, the Waco quarry, land, villages, construction equipment, unused material, and all other property connected with the project.

Continuous Fertilizer Production and Guarantees. To operate Nitrate Plant No. 2 "at the approximate annual capacity of its machinery and equipment in the production of nitrogen and other fertilizer compounds (said capacity being equal to approximately 110,000 tons of ammonium nitrate per annum) throughout the lease period, except as it may be prevented by strikes, accidents, fires, or other cause beyond its control."

National Defense. To permit the government in the event of war to take over and operate Plant No. 2 for the production of explosives, power to be furnished by the company. At the end of the emergency Ford was to be reasonably compensated for the use of the plant.

Research. To engage in research designed to achieve "fertilizer compounds of higher grade and lower prices than using farmers have in the past been able to obtain."

Profit. In order that the farmers may be supplied at fair price and without excessive profit, to restrict the maximum net profit from the manufacture and sale of fertilizer produced at Plant No. 2 to not more than 8 percent of the actual cost of production.

Farm Board. To the creation of a board controlled by farm organi-

zations empowered to inspect the company's books, ascertain whether profits were in excess of 8 percent, regulate the price if necessary and also to determine equitable territorial disposition of the fertilizer. Seven members of the board to be appointed by the President and confirmed by the Senate would be selected from panels submitted by the American Farm Bureau Federation, the National Grange, and the National Farmers Union. Two additional members would be selected by the company. An advisory member without vote would represent the Department of Agriculture.

Default. To agree that in the event of any violation of the contract, the Attorney General might institute proceedings in the federal courts leading to the cancellation and termination of the leases on one or both dams.

Liability. To accept the preceding proposals in whole and not in part. "Upon acceptance, the promises, undertakings, and obligations shall be binding upon the United States, and jointly and severally upon the undersigned, his heirs, representatives and assigns, and the Company, its successors and assigns."

The House Military Committee Approves. The bid ignored the Federal Water Power Act, the 50-year lease limitation, and, in particular, the regulatory provisions. It omitted any reference as to how Ford would use the vast amount of surplus power to be generated; a relatively small amount would be required for fertilizer production. The terms of the offer justified Secretary Weeks' curt letter of transmittal.

As so frequently happens in important legislation, congressional action on the Ford offer was determined in committee, especially by the chairmen. For the real story we must turn to the House Committee on Military Affairs.

Twelve days after hearings started on the Ford bid the Alabama Power Company made an offer, and later its president, Thomas W. Martin, testified at length. The company proposed to complete at its own expense Wilson Dam if granted a 50-year lease under the terms of the Federal Water Power Act. For \$5 million it would purchase the steam plants at Wilson Dam as well as the substations and the Warrior steam plant and transmission line to Sheffield. It would maintain the dam and furnish free power to operate the locks. It would not make fertilizer but would furnish free 100,000 secondary horsepower to the government or to anyone designated to operate the nitrate plants. Further power installations at Dam No. 2 would be

made only in accordance with market demand. The offer included no provision for building Dam No. 3.

Offers were also received from Frederick E. Engstrum, president of the Newport Ship Building Corporation, and from Dr. Charles L. Parsons, who had resigned from the government service. Each one proposed to form companies to produce fertilizer. The conditions were complicated, but, since neither proposed to operate the entire project as a unit, his offer did not receive serious attention.

The House committee was first to take action on the Ford offer. Its chairman was the genial Julius Kahn, strong supporter of private enterprise who pigeonholed the Wadsworth-Kahn bill for public operation of the shoals in the previous session, evidently with the approval of the committee.

Around the committee's table, at times of full attendance, sat 14 Republicans and 6 Democrats—12 supporting and 8 opposing the Ford offer. Champion of the offer was Representative John C. McKenzie, a farmer-lawyer from northern Illinois, who introduced the bill (H.R. 11903) for acceptance. Leading critics were Morin of Pennsylvania and James of Michigan. It was a hard-working committee. From February 9 to March 13, 1922, it questioned 34 expert witnesses, some at great length. Their testimony plus supporting scientific and legal documents makes a book of 1,206 pages printed in six-point type.

The political atmosphere in which the committee worked was supercharged. The big utility, fertilizer, and investment banking groups that had in the main supported the Republican ticket were in strong opposition to the Ford offer. They favored the bid by the Alabama Power Company. The administration was opposed to the Ford bid as drafted. On the other hand, individual letters, telegrams, editorials, and resolutions from farm and miscellaneous organizations, city councils and state legislatures were deluging Congress. The members were flooded with demands for immediate acceptance—and no fooling. A credible rumor was afloat that the unpredictable Henry Ford, defeated in his try for the United States Senate in 1918, intended to run for President in 1920. A congressional election was only eight months away.

In the bewildering flood of conflicting claims and propaganda there were four principal subjects on which the House Military Affairs Committee sought reliable information—fertilizer, finance, conservation policy, and uses of surplus power. Although invited, Ford declined to appear. Hence, keen attention was centered on the testi-

mony of his personal representative, William B. Mayo, chief engineer of the Ford company; Colonel Worthington, his adviser; and Gray Silver and R. F. Bower, officials of the American Farm Bureau Federation; the federation led the farmers' fight for the Ford bid.

Committee members repeatedly sought an answer to these questions: Was it technically possible to produce exceptionally cheap fertilizer at the Muscle Shoals plant? On what authority did Ford base his promise to reduce the retail price by one half?

William B. Mayo, questioned by Representative Morin on these points, produced undocumented statements by Dr. N. Caro and Mr. Washburn. Speaking of the cyanamid process then used in Germany Dr. Caro had stated: "The possibility therefore exists . . . of producing cheaply . . . ammonium phosphate containing roughly 45 percent of water-soluble phosphate acid and 20 percent of nitrogen." Washburn had said, "My anticipation is that the establishment of the nitrogen industry . . . with proper and legitimate Government co-operation, will give the farmer his fertilizer for one-half of what he would otherwise pay for it."⁴

Secretary Weeks called fertilizer production "the sticking point" and questioned whether Ford or his engineers knew whether it could be done. Major J. H. Burns, chief of the Nitrate Division of the Ordnance Department, said to the committee, "I honestly do not believe Mr. Ford with the present knowledge of the game would be able to materially reduce the price of fertilizer."

Bower, as technical expert for the American Farm Bureau Federation, cited the Washburn statement and quoted Leo H. Bakeland, a distinguished scientist who once testified that German authorities "intend to furnish the farmers of Germany nitrogen fertilizer at about one-half the price it is costing the consumers here in the United States and if Germany could do it we could."

Mayo testified that Ford had no new, secret process but was experimenting and was hopeful of the outcome. It was admitted that the cyanamid process installed at Plant No. 2 was already outmoded by the Haber process, that Ford would be forced to remodel it at an expense of several million dollars to make ammonium phosphate for fertilizer instead of ammonium nitrate for explosives.

Such evidence was unconvincing. The committee members carefully explored whether the proposed contract guaranteed that Ford would continue indefinitely to produce cheap fertilizer in quantity if it proved unprofitable. After a great deal of testimony on the point, Mayo answered, "Not unless it could be done profitably." There was

no clear provision in Ford's proposal that the government could recapture the power dams if the company ceased to manufacture fertilizer. Ford had consented only to the addition of a provision that the government could sue in case of default.

The Cash Considerations. As of July 1, 1922, the actual cash spent by the government on construction and maintenance of the Muscle Shoals project had reached \$106 million. Under the Ford offer, the government in addition would assume the cost of building Dam No. 1 to insure navigation, the accrued interest on the cost of the dams during construction, and the cost of flooding land for Dam No. 3. The additional costs amounted to \$17 million, bringing the government's total investment to \$123 million. For all this during his 100-year lease, Ford would pay \$5 million for buildings and properties, \$4.7 million for amortization (\$23,373 semi-annually), and \$5.5 million in annual installments for maintenance.

Representative McKenzie told Mayo that "it would probably cost the government more than Mr. Ford's entire offer of \$5,000,000 to be able to deliver the Gorgas plant to him." Mayo responded that Ford would not agree to exclude this item and that the offer must stand or fall on that point because the plant was needed for immediate production of low-cost power.

The Power Aspect. It was established that the ultimate annual capacity of the two dams would be 3 billion kilowatt hours of primary and secondary power. No questions were ever asked about the annual wholesale or retail value of this power if sold at prevailing rates. The subject was not mentioned in the committee report.

Several members sought specific information on what Ford proposed to do with surplus power not used in making fertilizer. They were clearly suspicious that possession of the power was the real objective and that fertilizer production was a pretense. Worthington had indicated that Ford at first had "hesitated" over the fertilizer angle and in answering Representative Miller of Washington said, "Why certainly, he went to Muscle Shoals to see the water power primarily." Mayo would testify only that it was Ford's intention "as quickly as possible to use all the power." He told Representative Fields that Ford also hoped to "ultimately . . . make his raw materials [steel and aluminum] for his automobiles, trucks and tractors . . . it has been his dream to make the combined price for the automobile, the truck and the tractor at \$1,000. At present the price runs to about \$1,200."

It was ascertained several times that Ford declined to be subject to the Federal Water Power Act of 1920. Greene asked "whether

Mr. Ford would be willing to come down to 50 years." Mayo replied: "He would not." Mayo further agreed that Ford's company would have a preferential right to the power in perpetuity beyond the 100-year lease.

The Committee Approves the Offer. In executive sessions the committee decided that Ford's was "the only proposal worthy of serious consideration." A bill accepting it was introduced by Representative McKenzie on June 5, 1922. Four days later he submitted, as acting chairman, a report to the House with the recommendation that it "pass" speedily. The House followed the Committee's findings for the ensuing two years.

Basing its action necessarily on section 124 of the National Defense Act of 1916, the committee found that the Ford offer was the only one comprehensive enough to meet its terms. On one point the committee was unanimous and specific: government production of power and fertilizer must be eliminated and private enterprise substituted. We read: "The committee was impressed with the far-reaching possibilities for the good of the nation involved in the operation of the Muscle Shoals project by private enterprise rather than Government operation, and was further impressed with the fact that the subject is one of such transcendent importance that the whole membership of the House should have an opportunity of passing on the proposition." "To have the Government undertake to engage in the manufacture of fertilizer ingredients, with political superintendents, foremen, and straw bosses is unthinkable, and to undertake such a scheme would be unspeakable folly."

In inviting bids Secretary Weeks had asked for offers which would give a reasonable return on the government's investment in Dam No. 2. He probably expected a reasonable price for the nitrate plants and other properties. His attitude made things difficult for the committee, which frankly admitted that the \$5 million offered for the properties was a "mere bagatelle" in consideration of the millions spent on them. But the group reminded the House that it had not been considering the problem on the basis of the pecuniary returns from Mr. Ford. They contended that the pledge to hold Nitrate Plant No. 2 in readiness for 100 years "as a matter of national defense is a thing of far more importance than the payment of a few million dollars." Further, that Ford's production of fertilizer would be of equal if not greater importance.

The four percent amortization scheme was mentioned as another reason why the bid commanded attention. The 100-year lease period

was held "not derogatory to the interests of the government but to its advantage" since Plant No. 2 would be kept in readiness. The majority decided against including the Gorgas steam plant and transmission line in the sale as not necessary to Ford's operation. The Alabama Power Company had offered \$2,500,000 for it; yet eight members signed a minority report protesting this exclusion. Strong emphasis was placed on the high cost to the government of permitting the plant to lie idle. Prompt passage of the bill was urged.

A Minority Report. The committee was sharply divided. A few days later Representative Charles C. Kearns, acting for himself and seven other members (including Morin of Pennsylvania and Hill of Maryland) filed a sharply worded minority report charging that the Ford bill violated the Federal Water Power Act; that the amortization plan was "frenzied finance" and a shrewd way of paying a debt of \$50,000,000 with the comparatively insignificant sum of \$4,672,600; that the maintenance of the dams and repairs would cost \$670,000 annually while Ford would pay only \$55,000; and that, in sum, Ford would be given preferences and rights denied to other men; and therefore the project should be leased under the terms of the Federal Water Power Act.⁷

The 67th Congress, however, was in no hurry. A few members made speeches on the bill, but no action was taken on it, and the Ford offer passed on to the 68th Congress for decision.

Norris Gets An Unwanted Job. The Ford offer was forwarded to the Senate by Secretary Weeks on February 7, 1922. Senator Underwood, who had favored government operation in the previous Congress but now supported the Ford bid, moved that the document be sent to the Committee on Agriculture and Forestry. Important changes had taken place in the membership of this committee since obtaining passage of the Wadsworth-Kahn bill for government operation in the previous Congress.

Senator George W. Norris of Nebraska had succeeded Gronna as chairman of the committee. On the Republican side, Kenyon and Wadsworth were gone. New members were Gooding of Idaho, Ladd of North Dakota, Norbeck of South Dakota, and McKinley of Illinois. On the Democratic side Gore had gone, and Caraway of Arkansas and Heflin of Alabama, a vociferous advocate of the Ford offer, had been added.

Interestingly enough in the light of subsequent events Norris opposed referral of the bill to his committee. Twenty-two years later he wrote in his autobiography: "I did not ask for the job of leading in the

battle for TVA. I thought as chairman of the Committee on Agriculture of the Senate that I should be spared its great burden. I felt deeply I lacked the strength, the time, and the technical background to discharge that task creditably. I have never known how it came to be dumped on my lap."⁸

The Senator's feeling was understandable. Although he had joined Representative William Kent in obtaining the passage of the Hetch Hetchy bill of 1913, granting municipal ownership of federal power to San Francisco and had voted for section 124 of the National Defense Act in 1916, he was not greatly interested in public power. He once told the writer that it was the Muscle Shoals controversy that brought him to an understanding of the importance of multipurpose river development and electric power in the national economy. At that time he was overburdened with work on bills for the relief of agriculture. The Ford offer was dumped on his lap, of course, because the senators were thinking not of power but of fertilizer, which the Ford offer had made a paramount political issue. The Muscle Shoals matter had been in the hands of the agriculture committee from the beginning. When Underwood and others urged that "the prime objective is one of agriculture," Norris was forced reluctantly to accept the assignment. He had favored municipal ownership but was still unconvinced of the feasibility of federal ownership and operation. As to the Tennessee River, he said: "I came to the conclusion gradually that the possibilities were infinitely greater than had been at first contemplated."⁹

Regarding the Ford offer, Norris told the Senate in 1921: "I consider the proposition as one of great importance, involving a great deal of money, and involving a policy which, under the circumstances, it is very difficult to decide upon. I confess that if it were left to me to decide today, I would not be able to tell whether I was in favor of accepting Mr. Ford's proposition or rejecting it, although I have read it twice."¹⁰

The First Norris Bill for Government Operation. By the time the Senate committee settled down on April 10, 1922, to continuous hearings on the Ford offer the House committee had been holding hearings for several weeks. Norris observed that the alternative of continued government operation of the Shoals project had been ignored; no bill providing for it had been introduced and no witnesses favoring it had been heard. Believing this unwise and that public as well as private control should have its day in court, Norris on the first day of the hearings introduced a bill creating a federal chemical corpora-

tion empowered to operate the whole project. Unlike the Wadsworth-Kahn bill, Norris proposed a civilian instead of a War Department-operated government corporation.

Otherwise the Senate committee had on its table the same bids the House committee was currently examining. As with the House committee, major attention was given to the Ford offer. Hearings extended intermittently from February until June. By and large, the same witnesses were heard and much the same evidence was given as in the House. To Norris, the two paramount questions were whether Ford could produce cheap commercial fertilizer, and what effect acceptance of his bid would have on national water power policy.

Edison Is Noncommittal. As to the question whether Ford could produce cheap fertilizer, up to May 20, 1922, the evidence had been negative. And then, more dramatic than if Henry Ford himself had consented to testify, Thomas A. Edison was heard. Everyone in and outside Washington expected Edison's expert testimony to support the Ford proposition. The men were warm friends and had visited Muscle Shoals together. On the stand, however, Edison pointedly declined to commit himself. He thought cheap fertilizer could be made at Muscle Shoals and, at Ford's request, was experimenting on a process for obtaining cheap potash from deposits in the Tennessee Valley. He was also working on phosphates. When questioned by Senator McNary about his prospects, he replied: "I might fail. I have never yet eaten boiled crow and I do not want to start now . . . wait till I get through experimenting." When Capper and Heflin pressed for an opinion on the details of the Ford offer—meaning, of course, the nitrate angle—he answered abruptly, "I do not know anything. I never worked in that line. I don't attend to his business." But insistent Heflin, determined to wring from Edison a newspaper headline backing up the Ford bid, put the question straight: "Do you think Ford can manufacture cheap fertilizer at Muscle Shoals?" It was an unfortunate query for the proponents of the Ford offer. The wary Edison replied: "Oh, he will put up all kinds of factories for making anything. There is no end to him." Edison's answer gave comfort to those claiming that Ford's real objective was not fertilizer but automobiles and other products. Reminded that Ford wanted to "get" Muscle Shoals, Edison remarked: "Yes, he seems to want it. I don't know why. He has got enough work now. I think he would be very foolish. His wife thinks so too. He has got \$127,000,000, he told me, subject to check. Now, what the devil does he want with more money? He wants to help the farmer."

Since Mr. Edison had nothing of importance to contribute, the hearings soon closed, leaving the committee in graver doubt than ever about the possibility of getting cheap fertilizer ingredients at Muscle Shoals.¹¹

In the course of the hearings some members of the committee, and especially Chairman Norris, privately studied air nitrate fixation. With the aid of eminent civilian authorities and government experts they reached the conclusion that the cyanamid process was obsolete and that no process yet discovered would guarantee cheap fertilizer. Major J. H. Burns, chief of the nitrate division of the Ordnance Department, was especially helpful. When the hearings closed Norris warmly commended him for the "absolutely unbiased services he had rendered in getting the facts." For example, asked to report on the cost of power in relation to cheap nitrates, the Major said that to continue the cyanamid process at Plant No. 2 when it was converted to fertilizer production would require power at one mill per kilowatt hour whereas the cost of power from Wilson Dam would be at least three mills. Hence, Plant No. 2 was obsolete for commercial purposes and valuable only as insurance for national defense. Edison himself had implied as much when queried by McNary. He had said: "Why the field is unlimited. The Lord knows in 20 years present processes may be obsolete. They may all be dead and buried. It is continuous, continuous—improvements go on forever."

Retail Value of the Power. The House committee gave no attention to the retail value of the hydro-electric power to be developed at the dams. It was assumed that ultimate consumers would pay for electricity at current private utility rates. The executive officer of the Federal Power Commission, O. C. Merrill, the electrical engineer who reported on monopoly in the water power industry in 1916, was not requested to testify, but Norris summoned him before the Senate committee where he estimated that the total annual output of the two power plants at Dams No. 2 and 3 would be three billion kilowatt hours—one half would be year-round dependable power, and one half would be secondary power. If sold at a minimum average rate of four mills per kilowatt hour for the primary power and one and one-half mills for the secondary power, the wholesale revenue would total \$8,250,000. Domestic consumers were paying 8.2 cents per kilowatt hour for electric service. The Alabama Power Company was selling its output at an average 2.5 cents per kilowatt hour to all classes of customers—domestic, commercial, and industrial. At this rate, the Muscle Shoals power

would be worth \$75,000,000 if all power was sold. If sold at load factors of from 30 percent to 60 percent, as was then customary, it would still be worth \$30 million to \$40 million per annum.

Viewpoint of Conservationists. To present the far-reaching effect of the acceptance of the Ford offer on established conservation policies, Norris summoned Philip P. Wells, chief law officer of the Forest Service under Theodore Roosevelt. Wells had also been counsel for the Inland Waterways Commission of 1908 and had written the first official documents applying conservation principles to specific water power grants, the famous Rainy River and James River veto messages given by Roosevelt in 1908 and 1909. Since then, either as a government or civilian attorney, Wells had a hand in all water power legislation. He was nationally known as an authority on the subject.

Wells emphasized that the Ford proposal violated not only the 50-year lease period but every other basic principle of the Federal Water Power Act of 1920—rentals, regulation of rates, provision of capital by lessees and assumption of all disaster risks to dams, and payment of excessive profits to the government ("which means absolute destruction of what we have fought for the people for 15 years and won. That is why I am here.").

Wells was a right-wing conservationist who did not favor government operation as a rule but who supported the Norris bill as consistent with the water power policy and as a military necessity with a vast government investment to be protected. These ideas were to be endlessly repeated with great influence.

Norris Reports His Findings. The Senate committee was sharply divided in its recommendations. Two sizzling reports were made. Party affiliations were forgotten. All bids were unanimously rejected except Ford's, which was rejected 9 to 7. The majority report against the Ford proposal was signed by Norris, Page, McNary, Keyes, Gooding, Norbeck, Harreld, and McKinley, all Republicans, and by one Democrat—Kendrick. The minority report favoring the Ford offer was made by Ladd and Capper, Republicans, and Heflin, Harrison, Caraway, Ransdell, and Smith (South Carolina), Democrats. Five favored the Norris bill for government operation—Norris, McNary, Gooding, Norbeck, and McKinley; all were Republicans.¹²

Two surprises emerge from these lineups. Democrat "Cotton Ed" Smith, father of the provision of law under which the Muscle Shoals plants were built, abandoned public operation and went over to Ford while Republican McKinley, banker and head of a private power

company, sided with Senator George Norris and public ownership.

Senator Norris' reaction to the Ford proposal was similar to that of the majority and of thousands of others who had studied it closely. He was pleased when it was first announced that the capable, great-hearted Henry Ford proposed to help the farmers; then, striving to keep an open mind, he became puzzled, critical, indignant as he grew aware of the startling discrepancy between the terms of the proposed 100-year contract and the story told the nation. In Norris' view, abandonment of existing conservation policies was implied in acceptance of the contract. The Norris' report was a critical analysis of the facts plus a blast of indignation intended to arouse Congress and the nation to their significance.

The Senator was not impressed by the sentiment then sweeping the country to "let Ford have it" on the assumption that the great industrialist was an unselfish man. Reminding his readers that Mr. Ford was then 68 years of age and would be connected with the proposed corporation only a few years, he commented: "Conceding all of the virtues to Mr. Ford that his friends claim in his behalf, is that any reason why a corporation organized by him should be given a privilege of extreme and almost unlimited value that we refuse to extend to any other corporation?"

The proposed of \$5 million for the real and personal property at the Shoals Norris treated with scorn. Five pages in the report were devoted to listing properties, which had cost \$90 million, including such items as the two great nitrate plants, three large steam power plants, several miles of railroad track with engines and cars, two sizable villages equipped with all modern facilities, a great concrete mixing plant, more than 6,000 acres of land, vast quantities of unused lumber, and other materials, including platinum worth \$5 million. Norris listed a few items not needed by Ford which could be sold the next day for more than enough to equal Ford's \$5 million. He added that if a minor owned such a property and sold it for such a sum "there is no court in Christendom but would promptly set aside the conveyance as having been obtained for want of consideration." The value of the properties acquired, the report continued, "sinks to insignificance when compared with the lease of the dam."

Summing Up the Ford Proposal. In an effort to correct public misinformation about the Ford offer, the Norris report dealt directly both with propaganda and the facts: "The wonderful propaganda that has been carried on over the country in favor of the Ford offer has led the people to have an entirely erroneous idea as to what the

Ford offer really is. It is difficult to harmonize our idea of Mr. Ford's fairness with his silence on this subject when his name is so often used in exaggeration and misrepresentation as to just what he offers to do. The country has been given to understand that Mr. Ford has guaranteed to reduce the cost of fertilizer one-half. He has done nothing of the kind The country has been given to understand that he pays the Government 4 percent on its investment in the two dams. He does nothing of the kind. [The report calculated, on a basis of 6 percent compound interest, that Ford could profit \$14.5 billion from federal investment in the project.]

"The country has been given to understand that the Ford offer provides for the repayment to the Government within the 100-year period the entire investment that the Government has made. His offer does nothing of the kind Total payments amount to less than 3 percent on the investment and he never pays one dollar of the principal. The people of the country have been led to believe that the Ford offer means a reduced price for electricity to the consumer. It means nothing of the kind. He has not agreed to furnish a single kilowatt hour to any home or to any manufacturing concern except his own When you bring together the results that must follow from these two divisions of the Ford offer, the mind is dazed at the unreasonableness of the proposition, at the enormity of the gift

"The acceptance of Mr. Ford's offer would turn back the clock of progress and open the door wide for the use of natural resources by corporations and monopolies without restriction, without regulation, and without restraint. If this proposition is accepted the fight for the preservation of the natural resources of the country is lost, the surrender to special interest and monopolies is absolute, and a precedent is established that will take from the control of the people the greatest resources that have ever been given to man by an all-wise Creator."¹⁸

The report concluded with a brief analysis of the Norris bill (S.3420) for government operation.

The Minority Report. Senator Edwin F. Ladd wrote and presented a minority report attacking the Norris bill for public operation on principle and thus supporting the party line drawn by conservative Republicans. Once more the nonpartisan character of the conflict and the curious changes of attitude on the part of individual members disclosed by the record are illustrated.

The two Republicans signing the document were liberals. Dr. Ladd, a chemist by profession, had been president of the North Dakota Agricultural College. He had been chosen by the Nonpartisan League

as its candidate in the election of 1920. The League was a radical farm organization then operating chiefly within the Republican Party. Its candidates were in control of the state government and had established state-owned and state-operated grain elevators as well as a state bank and a state hail-insurance company. Hence, although Ladd was a strong supporter of public enterprise in North Dakota, he was convinced that the hostility of the administration foreclosed the possibility of government operation of the Shoals project, and a lease to a liberal industrialist such as Ford was the only way out. Others who later came to Norris' aid were privately of the same opinion.

Senator Capper, the other Republican, was a publisher of farm journals and a conservationist. Of the five Democrats signing the minority report, Smith, Heflin, and Harrison had voted for the Wadsworth-Kahn bill, Caraway and Ransdell were absent. Like the McKenzie House report, the Ladd report was one of expediency. It begins: "It is the firm conviction of the undersigned . . . that the heavy losses to the Government, that, since the Armistice, have piled up at Muscle Shoals, now amounting to about three million dollars, should be stopped, and . . . the quickest way to stop these losses is to accept Henry Ford's offer . . ."

Ford's payment of \$5 million for the properties was defended because of "the large amount of money he must invest to produce fertilizer." The amortization plan was justified because of the claimed national benefits from Ford's operation, such as navigation on the Tennessee River without cost to the government. The possible effect of the offer upon national conservation policies was not mentioned except for giving approval to the 100-year lease period. It was admitted that commercial success of the venture was controversial and the argument was turned against government operation. How "in the face of such testimony can the Senate ever agree for the United States to go into the fertilizer business at Muscle Shoals?"¹⁴

Thus, the Ford offer was before the 67th Congress, but the committee reports were never acted on. The time was August 1922. A full year had passed since Henry Ford, urging speedy action, had made his offer. A year and four months had passed since the Harding Administration had embarked on the seemingly easy task of disposing of this "war baby." A year and six months was to pass before Congress again came to grips with the Muscle Shoals problem and the House passed a bill accepting the Ford proposal. At first only a local affair, Muscle Shoals had become the center of a struggle over natural resources policy and control of the nation's undeveloped water power.

CHAPTER XII

HENRY FORD DEPARTS

In the elections in November 1922 the Republicans retained control of Congress, but their majority in the Senate had been cut from 22 to 10 and in the House from 77 to 14. The G.O.P. tide of 1920 had receded. Republicans had not only lost seats to Democrats, but a few Farmer-Laborites and Independents had appeared in Congress.

An irritating 18 months elapsed on the Muscle Shoals legislation, but in that interim the basic conditions of the Ford offer and its effect upon conservation policy came to be better understood. Two days after the 68th Congress convened on December 3, 1923, Representative McKenzie reintroduced his bill (H.R. 518), and the final stage of conflict over the Ford offer began. In the meantime a series of important events had affected the situation.

A year earlier (April 25, 1922), Senator Johnson and Representative Swing, both California Republicans, had introduced identical bills providing for government construction and operation of Boulder Dam (now Hoover Dam) on the Colorado River. Discussion of these bills had heightened the controversy over public versus private power.

In March 1923, as the result of a resolution introduced by Senator Norris in 1922, the Federal Trade Commission reported that competition was keen among the 642 fertilizer manufacturers in the country; and that although the six largest sold about 60 percent of the total, they were competitors. There was no overall "fertilizer trust" dominating the industry as claimed. Since the report was made to the Congress while Chairman Victor Murdock, well-known progressive Republican and former Kansas congressman, and Huston Thompson, a progressive Democrat, were in control of the commission, it had great influence.

The Gorgas steam plant and transmission line had been sold by Secretary Weeks on September 25, 1923, to the Alabama Power Company for \$3,472,487. Construction of Dam No. 2 (Wilson Dam) was proceeding rapidly. Some \$8,500,000 had been expended, bringing the total to more than \$25 million instead of the \$17 million when Ford made his first offer.

President Harding had died, August 2, 1923, and had been succeed-

ed by Calvin Coolidge whose attitude toward the Ford proposition was uncertain.

In February 1924, a few days after the Ford bill had been reported favorably in the House, another natural resource, the Teapot Dome Oil lease, became a nationwide scandal. It had been simmering for two years. Secretary of the Interior Albert B. Fall was brought before a Senate investigating committee. He had leased to oil magnate Harry Sinclair federal oil lands in Wyoming's Teapot Dome district reserved for the Navy's use. Similar leases to naval reserves in the Elk Hills district in California, worth many millions of dollars, had been given to Doheny. Fall denied bribery charges but declined to testify on the grounds of self-incrimination. His attitude, tantamount to a confession of guilt, shocked the nation. Fall ultimately went to prison. He was the only Cabinet officer in American history to meet such a fate. This sad story aroused national anger over the loot of natural resources. Comparisons were inevitable. Even the sedate and temperate Theodore Burton who, after being defeated for reelection to the Senate in 1916, had been returned to the House, declared "What policy of economy or conservation of public rights or interests can we insist upon if we throw this [Muscle Shoals] away? There are possibilities there my friends that make Teapot Dome look like a bagatelle and Mr. Doheny and Mr. Sinclair as men whose injured innocence should be forever vindicated."¹

Finally, to add further harassment to a troubled administration, Henry Ford in January 1923 became a candidate for President. "Ford For President" clubs had been organized in many states under the slogan "We Want Henry." But Henry kept to himself whether he would seek nomination as a Republican or a Democrat or run as an Independent. The popular response was astounding. By fall, old party leaders were genuinely alarmed. Newspaper and other polls showed Ford a dangerous competitor. Then came the unexpected.

President Coolidge invited Mr. Ford to the White House. He accepted, although immediately after the sale of the Gorgas power plant in October he had denounced Weeks and the administration as being controlled by interests inimical to the farmers. The visit was made, but nothing revealed as to its import. On December 6, 1923, Coolidge in his message to Congress by unmistakable inference endorsed the Ford bid for Muscle Shoals. Ford immediately abandoned his presidential campaign and in December publicly endorsed Coolidge as a "safe" man for the presidency. A political uproar followed, including praise from conservative Democrats, and an inquiry by the Senate

Agriculture Committee in its Muscle Shoals hearings. Senator Hiram W. Johnson made a terrific attack on Coolidge. Muscle Shoals had become a bipartisan political football of the first order.

The House Military Affairs Committee Stands by Ford. In the 68th Congress, the House Military Affairs Committee was weary of the Shoals debate. After eight relatively short sessions the committee reported the McKenzie bill favorably on February 2, 1924. One important amendment provided that Ford be authorized to build a steam generating plant and transmission line to Muscle Shoals at government expense. The plant would be a substitute for the Gorgas steam plant which Secretary Weeks had sold. The amendment was in response to Ford's threat to withdraw his offer if the authorization were not made.

The committee was divided. Six members headed by Hull, an Iowa Republican, filed a minority report calling attention to H.R. 6300, a bill that Hull introduced on January 28, 1924. H.R. 6300 presented a bid from the Associated Power Companies, offering to lease the project under the terms of the Federal Water Power Act. The bid is noted here because of its bombshell effect. It signalized the entry of the power companies into fertilizer production in competition with Ford who had announced that he would build transmission lines to serve municipalities and farmers in competition with the companies.

The House Approves the Ford Tender. The House settled down to a week of hectic debate on March 4, 1924. The outcome was a foregone conclusion. A large majority was determined to devote the Muscle Shoals project to the manufacture of fertilizer by Henry Ford and on his terms regardless of its effect on conservation policies. As Wefald of Minnesota put it, "Mr. Chairman, there is one word that has resounded throughout this whole debate, and that is fertilizer. If verbal and intellectual fertilizer would suffice for the purpose of the farmer, if it would make crops grow as it has made oratory blossom here, we would now have on hand a fertilizer supply for the whole length of this proposed contract."² After three days of general debate, three days more were given to amendments. Burton's crucial amendment to restrict the lease to 50 years and bring Ford under the control of the Federal Water Power Act of 1920 was lost, 82 to 104.

Throughout the long discussion only four voices were heard favoring government operation. LaGuardia, serving his first term (afterward a famous mayor of New York City); Wefald, first Farmer-Laborite from Minnesota; Williamson, Republican of South Dakota, and Wainwright, Republican of New York, who stated the case thus:

"I believe the time has come peremptorily to decline to part with ownership and absolute control of any further natural resources to private interests. I further believe that this policy and principle particularly apply to power contained in the flowing waters of our great rivers and streams, especially where the structures erected to make that power available have been created by public funds."^a

At last, on Monday, March 10, 1924, H.R.518 was approved 227 to 143, with only 60 not voting, and sent to a waiting and doubtful Senate, where it was referred to the Committee on Agriculture and Forestry.

The Senate Committee on Agriculture Recommends Government Operation. Having once decisively rejected the Ford bid, the Senate Agriculture Committee was expected to give the vexatious Muscle Shoals problem short shrift. Senator Underwood and Ford adherents throughout the country, encouraged by their triumph in the House, demanded immediate action, but the committee declined to be hurried. Chairman Norris, Senator McNary, and others now had a vision of multi-purpose development of the entire Tennessee River basin which was more grandiose than Ford's dream.

Norris was playing for time. For six weeks (April 16 to May 26, 1924) he conducted hearings as an "educational campaign." He had a legitimate excuse: two interesting new bids for the shoals. One was from Elon H. Hooker, himself an able chemist and head of a chemical manufacturing concern, who proposed to form a company and in effect operate the project for the government, to make 40,000 tons of fertilizer annually, generate and sell power under the terms of the Federal Water Power Act, and divide the profits with the government. Senator Wadsworth was so impressed by the proposal that he introduced a bill for its acceptance. Another bid, from the Union Carbide Company, proposed to utilize only parts of the project for fertilizer purposes. Norris had another reason for bidding for time. He had a new bill of his own—his second.

Out of the mass of chemical, engineering, legal, and historical data presented at these day and night hearings, three conclusions emerged which were set out in the report submitted to the Senate on June 2, 1924. First, the McKenzie bill contained no basic improvements over the original Ford bid of 1922 and was therefore rejected. Second, there was as yet no process that would materially reduce the cost of fertilizer, not to mention reduction by one-half.

Norris learned that Dr. Harry A. Curtis, a chemical engineer, had made a study of the nitrogen situation for the Commerce Department,

then under Secretary Hoover. Without knowing its contents he secured the passage of a Senate resolution requesting its immediate publication, which was done. Dr. Curtis found: "The whole proposition concerning Nitrate Plant No. 2 comes down to the fact that the plant as it stands today cannot be used to effect any immediate result of large consequence in the fertilizer situation." It might in the future but new processes and new fertilizer methods must be found. ⁴

Such opinions settled the matter for Norris and the Senate, *but not for others for two years to come.*

Third, the Muscle Shoals project should be retained by the government as a vital factor for national defense and as the first stage in an overall, unified plan to harness the entire Tennessee River for navigation, flood control, and power production. Meanwhile research should continue on a wide scale in the hope that a method of producing cheap fertilizer might be found.

This comprehensive idea, we may recall, was first advanced 16 years previously by the Inland Waterways Commission. It was here given its second legislative endorsement (the Newlands bill of 1913 was the first).

Governor Pinchot and Giant Power. Pennsylvania's unique approach to the power issue interested the committee. Under the leadership of Governor Gifford Pinchot the legislature of 1923 had appropriated \$35,000 to finance a survey of the energy resources of the state by a "Giant Power Board." Its consulting engineer, Morris L. Cooke, said that the purpose of the survey was to integrate the 300 private power companies of the state; create a giant power pool from which the individual companies could be served over a state-wide network of transmission lines; and generate power from large steam plants located near coal mines. Except for municipal plants the giant pool was to be privately owned and managed. It would be strictly regulated by the state. "Giant power," said Mr. Cooke, "signifies a social as contrasted with either a business or engineering approach to a study of power—rapidly becoming the most important single item affecting our material well-being."⁵

Governor Pinchot appeared before the Senate committee to explain the giant power idea and to oppose the Ford bid. He declared that he was not for government ownership, but, as against the Ford or any other offer for Muscle Shoals, he would prefer the Norris proposal because it embraced every conservation principle for which he had been fighting 25 years. ⁶

The Second Norris Bill. The Norris bill, of 1924 (S. 2372-S. 3214)

was a revised version of that of 1922 (S. 3420) but with changes reflecting a wider grasp on the part of the author and the committee as their study of the problems continued. The government, of course, would retain title to the properties but instead of creating a federal chemical corporation to manage the project, it was now designated the Federal Power Corporation. Dam No. 2 was to be completed and Dam No. 3 built. Surveys for new dams and reservoirs were authorized for the entire Tennessee River and not restricted to the stretch above the shoals as before. For the first time the government was authorized to construct high tension transmission lines for the sale of the power. Preference was given to public bodies in the sale of power from federal generators. Fertilizer production was divorced from power and transferred to the Secretary of Agriculture. The power corporation was directed to supply him with 100,000 horsepower of electric energy at cost, and he was to continue research and make and sell fertilizer either directly or by leasing the nitrate plants. On this feature the report commented: "If Mr. Ford or any of the other bidders . . . can produce fertilizer ingredients at Nitrate Plant No. 2 at a price that will reduce the cost to the consumer they will be able through the bill which we report to lease his plant . . . and go into business. The Secretary of Agriculture under the terms of the bill would have authority to make such a lease, even without charging any rent for the same" ⁷

As a new result of its labors the committee on June 2, 1924, reversed its previous action and recommended passage of the Norris bill for government operation. A minority report was filed by Senators Ladd, Smith, Harrison, Heflin, and Caraway as in 1922 but this time the signatures of Capper and Ransdell did not appear. The next day Underwood made a gallant attempt to secure immediate consideration of the report, but since the Republican National Convention was to begin on June 10 and important bills for farm relief were being rushed through, the Senate declined. It was determined to adjourn on June 7. Underwood, however, did obtain unanimous consent, with Norris' support, that on December 3, 1924, at 2 p.m., the Muscle Shoals bill would be taken up for consideration and "not laid aside until finally disposed of and that this order shall not be set aside except by unanimous consent." ⁸

Presidential Campaign of 1924. The campaign of 1924 faithfully reflected the attitude of political and financial leaders toward the Muscle Shoals problem (now a minor national issue) and their efforts to collect votes.

Meeting on June 10 the Republicans nominated Coolidge for President and Charles G. Dawes, a conservative Chicago banker, as his running mate. The platform contained no specific reference to Muscle Shoals, but it declared: "The Republican Party stands now, as always, against all attempts to put the Government into business." It reminded the voters that "the conservation policy of the nation originated with the Republican Party under the inspiration of Theodore Roosevelt." Hence conservation was approved and, definitely, the Federal Water Power Act, "which preserves the initiative of our people yet protects the public interest."

The Democrats met June 24 to nominate John W. Davis, a conservative New York corporation attorney, for President and Charles W. Bryan, governor of Nebraska and brother of William Jennings Bryan, for Vice President. The platform contained a specific plank titled "Muscle Shoals and Fertilizer." It read in part: "We reaffirm and pledge the fulfillment of the policy, with reference to Muscle Shoals, as declared and passed by the Democratic majority of the 64th Congress in the National Defense Act of 1916 for the production of nitrates" It demanded "prompt action" to start fertilizer production at Muscle Shoals. Section 124 of the National Defense Act, referred to in the platform, provided for operation "solely by the Government and not in conjunction with any other industry or enterprise carried on by private capital."

The newly organized Progressive Party on July 5 chose as its presidential candidate Senator Robert M. LaFollette, progressive Republican from Wisconsin, and for Vice President, Senator Burton K. Wheeler, progressive Democrat from Montana. The platform advocated "use of power of the federal government to crush monopoly, not to foster it, and public ownership of the nation's water power and creation of a public super-power system. Strict public control and permanent conservation of all natural resources . . . in the interest of the people." Thus, Senator LaFollette became the first presidential candidate, aside from the Socialists, to endorse government ownership and operation of water power. As governor of Wisconsin (1901-1905), he had fathered the movement to establish a state commission for regulation of utilities though the results were disappointing.

A campaign of unusual acerbity followed. The Republicans won. Although the Teapot Dome scandal and other issues overshadowed Muscle Shoals and conservation, they received considerable attention.

In the midst of this heated campaign the unpredictable Henry Ford, to the astonishment of the country, abandoned his quest for Muscle

Shoals. *Collier's Weekly* (October 18, 1924) carried as a leading article an interview with Ford by Samuel Crowther. The heading stated: "Henry Ford Tackles a New Job. He announces through *Collier's* that he withdraws his bid for Muscle Shoals and will develop power and chemicals from coal in clean mining towns in our own way and outside of political meddling." Ford was quoted as saying, "Muscle Shoals? That is not a live issue with us any longer . . . [what] should have been decided by anyone within a week has become a complicated political affair . . . Productive business cannot wait on politics. Therefore we withdraw our bid."

Many believed that Ford had come to realize that Coolidge could not deliver Muscle Shoals to him over the mounting opposition led by Senator Norris.

CHAPTER XIII

THE UNDERWOOD-COOLIDGE COALITION

Henry Ford's unexpected abandonment of his dream to harness Muscle Shoals left those determined to devote the project to fertilizer production at full capacity in a bewildered and embarrassing position. They had denounced any lease to the "Power Trust" or the "Fertilizer Trust" and also opposed government operation, and now Senator Norris' bill was the only one dealing with the subject on the calendar of either House.

The administration was likewise in trouble. President Coolidge was heavily obligated to the utilities for having supported him in the November election. On the other hand, the normally Republican farm voters in the north and the farmers of the solid Democratic south where the power companies were unpopular had been sold on the idea that Muscle Shoals would be dedicated to agriculture in peacetime and that fertilizer production was feasible.

Moreover, businessmen of the Tennessee Valley were terribly disappointed over Ford's withdrawal. For 18 years they had in good faith urged development of the Shoals by private capital. Six years had elapsed since the end of World War I. They were already suffering from the postwar depression, and now there was prospect of another delay. Wilson Dam would be completed and ready to generate electric energy in July 1925. No bid as yet had approached Secretary of War Weeks' demand that any lease should adequately protect the Government's investment.

Meantime, the position of the conservationists had been greatly strengthened. Ford's refusal to abide by the Federal Water Power Act had contributed to his failure. There was no more talk of 100-year leases. The concept of multipurpose development of the Tennessee from source to mouth was gaining adherents. Doubt over whether it was possible to produce cheap commercial fertilizer was disappearing.

It was widely anticipated that the 68th Congress would "pass the buck" on the Muscle Shoals issue to its successor. Instead there ensued perhaps the most sensational legislative battle in the long series of conflicts over the project; the battle lasted throughout the session. Private capital came nearer to capturing the government project in this congress than at any other time.

Underwood Attempts a Coup d'Etat. The Ford bill (H.R.518) had passed the House on March 10, 1924. The Senate Agricultural Committee had substituted the Norris bill (S.2372), authorizing government operation on June 2. It had been agreed to begin debate on the Norris proposal at 2 p. m., Tuesday, December 3, at the start of the second session. The day before Senator Underwood, in a surprise move, introduced S.3507, a substitute bill providing for private operation. Debate began on Wednesday, December 4; the Senate was off for another session-long conflict over the Shoals.¹ It became known immediately that Underwood's bill had President Coolidge's support. Study of its provisions convinced its opponents that a deal had been made for leasing the project to the Alabama Power Company. When it was so charged, the country was presented with one of those weird coalitions of Northern Republicans and Southern Democrats which have characterized major economic issues in American politics since the war between the states. The Underwood-Coolidge bill, as it was often designated in floor debate, was a politically disarming compound of Ford fertilizer promises, administration power politics, War Department ambitions, and possible government operation. Its principal provisions follow:

The Muscle Shoals properties were "dedicated and set aside" for national defense and commercial fertilizer production. Dam No. 2 was to be completed, and Dam No. 3, a few miles above, was to be constructed by the government.

The Secretary of War was empowered, with the approval of the President, to lease the entire project as a unit. If unable to negotiate a lease by September 1, 1925, the Secretary should then organize a government corporation to operate the project. In either case "40,000 tons of fixed nitrogen must be produced annually" beginning four to six years after the project was started. In either case "the production of fixed nitrogen as provided shall be used, when not required for national defense, as far as it is practicable to do so, in the manufacture of commercial fertilizer" Profits on fertilizer were limited to 8 percent. Surplus power not required for fertilizer production when sold or used would be subject to state regulation and would be exempt from the provisions of the Federal Water Power Act. Annual rental was to be not less than four percent of the cost of Dam No. 2 and its power facilities. Rental on Dam No. 3 after construction was a matter for future negotiation.

Fertilizer research and experimentation, multi-purpose development

of the Tennessee River, and erection and placement of transmission lines were not mentioned.

Specific details and other terms were to be worked out and agreed to by the Secretary of War and the lessee.

If government operation became necessary, then on September 1, 1925, the Secretary of War was to appoint five persons to organize the "Muscle Shoals Corporation," an agency to be controlled by a board of five directors appointed by the President without confirmation by the Senate. The Secretary of War would be ex officio chairman, with power to designate a vice chairman who would act in his absence. One hundred shares of capital stock of no par value and 5 percent 20-year bonds not to exceed \$50 million were to be issued by the corporation. The Underwood bill freed the corporation from the provision in section 124 of the Act of 1916 that operation of such projects would be "solely by the government and not in conjunction with any other industry or enterprise carried on by private capital." If, after four years, net earnings did not meet the interest charges, operation by the corporation would cease until resumption was authorized by Congress.

Seven Weeks of Debate. The provisions of the Underwood bill and the unusual spectacle of an administration measure being sponsored by a distinguished Democrat again resulted in significant and puzzling realignments in Congress. Liberals voted conservative, conservatives voted liberal, party lines were disregarded by many; McKinley, who had supported Norris, went over to Underwood. McKellar, who had been a strong pro-Ford man, went over to Norris.

Underwood's bill was severely criticised even by the Secretary of War. Secretary Weeks, asked for his comment, wrote Norris listing a dozen objections to the measure because of its omissions and ambiguous language. "Without careful and thoughtful amendments it is unworkable."²

The bill received splendid publicity. The country's farmers were told that despite Ford's withdrawal they were to get cheap Muscle Shoals fertilizer. It was taken for granted that the backing of the President assured passage.

Senate Norris was disheartened and gloomily remarked to me, "They have the votes, but it is the same old game—seizure of the power under the guise of furnishing cheap fertilizer when that is as yet impossible." Nonetheless, Norris decided to fight to the end, conducting his opposition along three principal lines. He would compel Congress to pay attention to "scientific men." He would "show up

the power trust." He would insist on scientific development of the river basin in accordance with modern engineering concepts.

Underwood's Plea and McNary's Answer. The intensity of the struggle over the Muscle Shoals issue rose to a new high. Almost every legislative day for seven weeks the Senate debated the question, often at great length and with acrimony. Underwood insisted that this was a fertilizer, not a power, proposition. He argued that since Congress had demonstrated its incapacity to come to a decision, the Executive Department should be allowed to conclude the matter under directives to be set upon enactment of his law, especially since power from Dam No. 2 would be ready in July.

To these arguments, Norris and his supporters replied that the matter was for Congress to decide; that too many crucial matters were left to the President, whose position was well known; that even Senator Underwood's directives did not protect the public interest; that the terms of the Underwood bill proved that it was primarily a power, not a fertilizer proposition. As Senator McNary put it, delay was better than disaster. McNary had reference, of course, to the coalition attempt to sidestep conservation policies. He made a fight to eliminate Underwood's provision for state control over the use and sale of electric power and to restore jurisdiction to the Federal Power Commission. But Underwood was adamant, and the McNary amendment was rejected, 34 to 29.^{*} Jones of Washington, strongly opposed to government operation, offered an amendment requiring that any lease be submitted to Congress for ratification. His amendment was finally rejected, 43 to 38.

Outright military control of the leasing or operation of the project was another controversial provision. Dam construction by Army Engineers was one thing, hydroelectric power policy was quite another. The friendly cooperation long existing between the Army Engineers and the utility companies had been severely criticized in Congress. The Wadsworth-Kahn bill of 1919 was amended to transfer control of the government corporation from the Secretary of War to the President. Underwood attempted to reverse this policy, but the subject was so loaded with dynamite that he chose not to make an issue, and when Ladd moved to strike out "Secretary of War" and insert "the President" throughout the coalition bill, Underwood announced, "I do not care to resist it." The amendment was unanimously agreed to without a roll call.

Following the Ford formula in part, the Underwood measure would have the lessee pay an annual rental of 4 percent on the cost of Dam

No. 2 and the power facilities. Such rental would yield around \$1,800,000 on an estimated cost of \$45,000,000. The return on Dam No. 3 when completed was left for negotiation. Construction on Dam No. 2 had been resumed. The meager return proposed for its lease proved embarrassing to the coalition. Several Senators addressed themselves to this angle of the problem. McKellar, bitterly opposed to private monopolization of the power, attacked the Alabama Power Company in several speeches.

A Senator Demonstrates. A majority of the Senators were lawyers, not technicians. Senators seeking reliable information were inclined to take with a grain of salt scientific information emanating from their colleagues. But among them was a professional engineer, careful and considerate in his statements, to whom they listened with respect: a Republican, graduate of the United States Naval Academy, former state engineer, and creator and manager of a metropolitan utilities district responsible for the provision of water, gas, and ice for his home city of Omaha—Robert B. Howell of Nebraska. He astonished his colleagues by demonstrating that within a few years Muscle Shoals as a commercial proposition would have an annual value to the Alabama Power Company of some \$21,400,000. He reminded his hearers that the standard value of electricity was the cost of production in steam plants.

Senator Harreld remarked that Muscle Shoals, if turned over to a government agency to run, "will not be a white elephant." Howell agreed, adding: "Mr. President, in my opinion if the Government operates this great power plant it will enjoy a greater return therefrom than could possibly be obtained from a lease . . . and will ultimately cause a marked reduction in rates." ⁴ Howell's speech went unanswered. Startling as his figures were, they did not arouse the ordinary citizen. So, throughout the session, Norris, Brookhart of Iowa, Shipstead of Minnesota, and others kept hammering home what such values would signify when passed in reduced electric rates on to ultimate consumers.

Ontario Hydro's Example. Only one public superpower system on the continent could be cited as an example of what Muscle Shoals might do under government ownership and operation—the Hydro-Electric Power Commission of the Province of Ontario, Canada, which supplied wholesale power to 248 municipalities and many farm districts that did their own distributing of power. Senator Norris had visited Ontario. In describing "Hydro," he cited many Canadian cities and towns whose domestic consumers paid an average 2 or 3 cents

per kilowatt hour for electricity when householders in the United States were paying an average of 7.4 cents. His colleagues learned that Canada's Hydro was a \$241 million concern, selling around \$17 million worth of current per year, and that it was not in the red. Several Senators began asking questions.

"I am extremely interested," said Senator Ransdell. Did the Senator have any "figures" comparing Ontario costs with private rates in the United States? Norris had them. He exhibited photostat copies of two domestic bills stamped "paid," each for 334 kilowatt hours of electricity. By comparison Mrs. Cullum of Niagara Falls, Ontario, paid \$3.55 and Dr. Cora Smith King of Washington, D.C., paid \$23.18 for exactly the same amount of current. As another illustration, Norris cited the cost of lighting the International Bridge at Niagara Falls, served on the American half by a private company and on the Canadian by Hydro. To quote Senator Norris: "The same number of lights, the same bridge, the same river, the same method of production. All alike, the power coming from the stream under the bridge. Now for these people who go into hysterics whenever we say anything about the Government owning a municipal utility of any kind, let us see what the blessed private corporation charged on this bridge for the same light generated from the same power. The Canadian publicly owned concern charged \$8.43 per month. The American private corporation charged \$43.10 per month on the average."⁵

The Ontario story was effective and disconcerting to the opposition. The bridge example was too pat to escape publicity. *Labor*, weekly American newspaper serving the 15 railroad unions in this country and having a circulation close to a million, carried an editorial illustrated with a striking cartoon by John M. Baer. The editorial was widely reproduced. All the Hearst Sunday newspapers and several magazines gave the story similar publicity. Comparative rates became a subject of casual dinner table conversation. Mrs. Cullum and Dr. King became known to millions. Manufacturers, commercial houses, and offices were also served at similar low rates in Ontario. Official statistics of the Hydro and the National Electric Light Association were compared. For example, in 1926 the average cost of industrial power in Ontario was 93 cents and in the United States it was 1.5 cents per kilowatt hour. The average for all sales to customers was 95 cents in Ontario and 2.7 cents in the United States.⁶

Such comparisons were startling news to most Senators. They perceived something was radically wrong either with the professed "at cost" public rates of Ontario or with state-regulated private rates

in the United States. Doubtful conservatives and progressives alike desired an explanation by competent, unbiased authority. It was supplied them. It created a sensation on both sides of the international boundary. It resulted in the exposure of methods employed at the time to influence national legislation, public opinion, and elections—methods so extreme they came close to occasioning an international incident.

The Smithsonian Institution Explains. Norris made his Ontario speech on December 18, 1924. On January 18, when the conflict over the Underwood bill was at its height, the Smithsonian Institution, a highly respected government agency devoted to scientific research, published an illustrated monograph entitled "Niagara Falls, its Power Possibilities and Preservation." The author was Samuel S. Wyer, an associate in mineral technology. All members of Congress and many other government officials received copies of the monograph in the mails.

Senators discovered that more than one third of this study concentrated on utilization of the power and scenic beauty potential of Niagara Falls. Chapter 3, subtitled "Why Ontario Domestic Consumers Get Lower Priced Electric Service than Domestic Consumers in the United States," revealed that Ontario's Hydro was "tax exempt," that domestic rates were below cost, that "the loss is made up in part by higher rates for industrial consumers than charged in the United States," and that "part of the cost comes directly out of the Provincial treasury in the form of contributions and subsidies," and concluded with the information that "up to date the electric consumers from the governmentally owned hydroelectric system have failed to pay the actual cost of the service they received . . . by \$19,147,014." The economics was "unsound." Mr. Wyer stated that the deficit had to be made up by a marked increase in rates or by taxation. Charges like Wyer's were being made by American utilities, but in this case they came from an associate engineer of the Smithsonian with the endorsement of Dr. Charles D. Walcott, venerable secretary of the Smithsonian. In an introduction to the monograph Walcott had written: "There is also today a great public interest in and much misinformation on our water power resources and methods of selling electric service to the public . . . The following original investigation shows . . . The Niagara River is more than a mere boundary stream between two friendly nations. It is the dividing line between two radically different methods of rendering electric service to the public; governmentally owned on the Ontario side, privately owned but governmentally reg-

ulated on the United States side. Enough data are given in Part III to permit the reader to make an evaluation of these two methods."

Banner headlines in the daily newspapers informed the public that the Smithsonian had discovered the secret of Ontario's low rates—government subsidy. Editorials followed. The February issue of *The Nation's Business*, official magazine of the United States Chamber of Commerce, featured an article by Wyer summarizing one part of the monograph. An editorial note introduced Wyer as "a distinguished engineer who has just completed a study of Niagara for the Smithsonian," and indicated that his "plain statement of facts" was a trustworthy answer to Norris' claims.

Informed persons were astounded on two counts. They discredited Wyer's facts, especially that Hydro was \$19,147,014 "in the red" on its service. And how did it happen that the Smithsonian should give credence to such a charge? Why had a federal agency gone out of its way to attack the honesty of the official records of an agency of a friendly neighboring government, particularly when an Englishman, James Smithson, had willed his entire fortune in 1876 to the American people to found the Smithsonian as an "establishment for the increase and diffusion of knowledge among men."

On the House side Representative Henry Allen Cooper, liberal Wisconsin Republican who had followed official reports of the Ontario commission, stated that on receiving the Wyer pamphlet he had written upon it "propaganda misrepresenting the facts." He noted that Wyer's pamphlet was issued and circulated just about the time Congress was expected to take final action on the Muscle Shoals bill.⁷

Senator George Wharton Pepper, Republican of Pennsylvania, a member of the board of regents of the Smithsonian, requested an explanation from Dr. Walcott. Newsmen made inquiries. Correspondent Louis J. Heath called Secretary Walcott, Curator Mitman, and Editor True. All expressed confidence in Mr. Wyer as an able, honest, public-spirited citizen who to their knowledge had no propaganda connections with power companies. He was wealthy and had paid the cost of printing the monograph himself, a quite common practice. As to sources and accuracy of data, Wyer had told them that much of his information came from a report of the Gregory Commission, a royal commission that had investigated Hydro but whose findings had been suppressed. Heath gave Senator Norris a memorandum on his interviews which he put in the *Congressional Record*. It said:

"I asked Mr. Mitman if he understood the Gregory Report had never been published, but that Sir Adam Beck (Chairman of the Hydro)

had been powerful enough to suppress this report because it showed conditions unfavorable to the Hydro Commission. He stated that he had understood from Mr. Wyer that the report of the Royal Commission had been suppressed in this way, that the only available copy of that report had in some mysterious way been burned but that, unknown to Sir Adam Beck, Mr. Gregory had kept a carbon copy of the report; that it was this carbon to which Mr. Wyer had access, together with the books of the Hydro Commission, and that he had been furnished most of his information by Mr. Gregory.”⁸

The Heath memorandum was a new shocker. The Gregory report had been made on March 13, 1924, and copies furnished the press. A full-page article in *the Toronto Globe* summarized the Gregory report under the following headlines: “Hydro Electric Commission Vindicated by Investigation in Canada—Rash Charges of Irregularities Were ‘Baseless Ghost Stories’ That Faded upon Investigation—Gregory Commission’s Report, Tabled in Legislature, Completely Vindicates Hydroelectric Project and Even Commends Sir Adam Beck’s ‘Notable Service to his Province’—Not a Breath of Suspicion Found of any ‘Personal Wrongdoing’—Special Reference to Loyalty and Efficiency of Engineer Gaby and Acres—Mild Criticism of a Few Things Which ‘Have Been Wrong’—Thinks Radical Policy a Mistake.”⁹

Prime Minister Ferguson of Ontario, answering a letter of inquiry from this writer, wrote: “The statement that the report of the Gregory Commission was suppressed and burned is so extraordinary and unfounded it is difficult to treat it seriously.” He explained that the report was submitted to the legislature, and full copies were given to the press. The copy in his office was available to the public. In fact, the report had been tabled and no further action taken.

Sir Adam Beck Strikes Back. On the Sunday after the appearance of Wyer’s pamphlet, I telephoned Sir Adam Beck, chairman of the Hydro, at his home in London, Ontario, and informed him of its publication. I met with a gruff response. “What in hell do I care? Your power concerns are always lying about us.” He upbraided me for disturbing his Sabbath rest. I did not know then that he was a sick man who would die in a year. Angered, I inquired just as roughly: “Does it mean nothing to you that the honored Smithsonian Institution has published a brochure by Mr. Samuel S. Wyer, widely known engineer, in which he states you are short of serving power at cost by \$19 million and that is the reason why you have low rates?”

Sir Adam came awake: “What’s that? What’s that?” I repeated. “Send me a copy immediately.”

"There is a copy in the mails which should reach you Monday morning."

"Good!" Shortly thereafter Sir Adam sent me 1,000 copies of a pamphlet in which the "misstatements and misrepresentations derogatory to the Hydro Electric Power Commission of Ontario" were examined and refuted, under his own authorship. The copies were promptly distributed to all members of Congress and Washington officials concerned.

Sir Adam Beck not only denounced Wyer's principal statements of fact as "absolute falsehoods" but raised the question of the impropriety of an agency of the United States government questioning the integrity of the financial reports of an agency of a friendly neighboring government. His point struck home and the liberal press took notice. The *Baltimore Sun* of February 9 ran an editorial, "The Smithsonian Must Answer." Other papers did likewise. In a letter to Senator George W. Pepper, Dr. Walcott expressed regret that the Smithsonian had been brought into the controversy. "My thought in issuing the paper was to clarify the situation . . . Mr. Wyer explained the data used from the official reports of the Ontario government included an unpublished report of the Royal Commission appointed to investigate governmentally owned hydroelectric systems in Ontario."¹⁰

Norris Replies. The Smithsonian monograph, as *The Baltimore Sun* observed editorially, "received immediate and wide recognition . . . and was widely used in discrediting the Norris bill." Senator Norris was outraged, both because he felt the report made him appear to be a novice and even worse, it was misleading Congress and the public. He made inquiries, however, and held his peace until March 18. Then, supported by an impressive array of documents, he made a devastating speech, declaring Wyer's alleged facts and conclusions to be false and exposing the disgraceful fashion in which the Smithsonian officials had been duped.

No Senator replied. Pepper contented himself by inserting Dr. Walcott's letter in the *Congressional Record* together with a memorandum from Mitman, the curator, emphasizing that Wyer had paid for the pamphlet himself, that Mitman had not "had the least indication of a possible connection between Wyer and any industrial interests," that the curator believed Wyer to be honest in his purpose and would continue to do so until "I have received proof to the contrary."

No apology came from the administration or the Smithsonian, but Dr. Walcott withdrew the monograph from circulation, ordered the plates destroyed, and terminated Wyer's connection with the Smithson-

ian Institution. Four years later the relations of Mr. Wyer with private utilities were revealed by the Federal Trade Commission investigation of propaganda activities of utility corporations. Questioned by Chief Counsel Judge Healy, on May 11, 1929, Wyer under oath stated that in 1924 he had been employed by A. W. Thompson, president of the Duquesne Light and Power Company (Pittsburgh) to make "a detailed study of the entire power situation in Western Pennsylvania, Western New York and Ontario" for which he had been paid \$15,890 for services and expenses. As a part of this job he had collected the material for the Smithsonian monograph with Thompson's approval.

Judge Healy: "So that the actual printing of the Smithsonian pamphlet was paid for by the Duquesne Light and Power Company?"

Mr. Wyer: "Correct."

The witness also disclosed that the officers of the National Electric Light Association had previously been consulted and had agreed to pay part of the expense of the pamphlet but later withdrew and the Pittsburgh company paid the whole bill. The association, however, paid for a second edition of 12,085 copies for its own use. The pamphlet was reprinted in *Nation's Business*.¹¹

The Coalition Wins. Having before us the terms and import of the Underwood coalition bill, our interest now turns to the spectacular parliamentary battle that led to adoption of the bill by the Senate and then its abandonment.

On January 8 the Senate, which had been sitting as a Committee of the Whole, reported the bill favorably by a vote of 48 to 37. Norris was defeated, the Underwood substitute had displaced his measure, and a somewhat amended bill still retained most of its vital features. Seventeen Democrats joined 31 Republicans in approving the Underwood-Coolidge measure while 16 Republicans voted with 20 Democrats to reject it. In a strong appeal just before the vote, the Democratic floor leader, Joseph T. Robinson of Arkansas, justified support of the bill on the ground that it was in line with the Democratic platform. That was quite true insofar as the operation of Muscle Shoals would be devoted to national defense and the production of fertilizer, but no mention was made of another pledge calling for strong public control and conservation of natural resources including water power.

Opponents of the bill were angered at this sally. The next day Norris in a humorous speech ridiculed pro-Underwood Democrats for lining up with Coolidge Republicans. Referring to Robinson's quotation from his party platform, Norris called another "witness to the stand." The witness proved to be a pamphlet printed and circulated

throughout the west by the Democratic National Committee charging that the "Whole Coolidge Administration favored the power trust." Norris began with a quotation that all knew was from a speech by Governor Charles W. Bryan of Nebraska, brother of William Jennings Bryan and the Democratic vice presidential nominee: "If the water power sites of the country were allowed to pass into the hands of great combinations of capital, the people would pass under a yoke of servitude more galling, if possible, than any foreign landlord system'."

After reading numerous other quotations, Norris declared: "I want to have the country view the Democratic action here with these two pictures before it—one, the pamphlet from which I have been reading; the other, the speech of the leader of the Democrats in the Senate trying to convince his colleagues that the right place for Democrats was to go with these same Republicans, whom in the campaign just closed they had denounced as being part and parcel of the Electric Trust of America and said they were trying to defeat the public development of electricity everywhere and not permit the people to have the benefit of public development and public distribution of electric energy."

He sent the Senate into laughter over this picture: "Mr. President, I think that we ought to have some ceremony in regard to this getting together of brethren as shown by the roll call of yesterday There is the senior Senator from Alabama [Mr. Underwood]. If I were going to couple off these people, I would place the Senator from Alabama arm in arm with the Senator from Colorado [Mr. Phipps] . . ."

As Senator Norris went on lining up the pairs of Senators to attend a banquet to feast upon a fatted calf, the Senate and galleries roared with laughter. Senator Cummins, who was presiding, remarked: "Under the rules it is the duty of the Chair to admonish the occupants of the galleries with reference to applause and laughter, but inasmuch as the Chair cannot distinguish between applause and laughter on the floor and that in the galleries that duty will be deferred."

Members of the coalition were in turn angered, especially the Democrats. The gist of Robinson's response was: If you believe that the President is a crook then you are justified in committing yourself to the doctrine of government operation. Norris' ridicule of the ease with which party lines crossed and party pledges were forgotten was a powerful factor in the final defeat of the measure. Such exhibitions are fatal to party loyalty among the rank and file of party voters."

Final passage took four more days. Gloves were off and senatorial courtesy frequently forgotten. Stung by Norris' sarcasm on announ-

cing his position, Robinson said: "It is a serious and an important issue. It cannot be disposed of by the acts of a buffoon in this body or elsewhere. Ridicule is not argument. Sarcasm is not convincing to the minds of men who think."

Senator Heflin was more severe. "He [Norris] had me marching down the aisle with the genial Senator from Utah [Mr. Smoot]. I hardly know whom I would select to march with the Senator from Nebraska. I know one man, but he is dead. He died in Russia. His name was Lenin. If I had him here, I could yoke him up with the Senator from Nebraska, and if old Lenin was not swift of foot the Senator from Nebraska, in his headlong and mad rush into the very vortex of socialism and bolshevism would knock off all the footwear Lenin had on in the march."¹⁸

Equally conservative Democrats were unmoved by such charges. Oldest in point of service was Simmons of North Carolina, who made three long speeches against the Underwood bill on the ground of inadequate return on a property that would soon be "worth billions of dollars in all probability." Simmons sought to "save the Congress from such a colossal blunder." Senator Glass of Virginia, who had been Secretary of the Treasury in the Wilson cabinet, said: "I think the terms of the lease are utterly unreasonable and inadequate." And again: "Somebody may know just exactly who will get possession of this property and upon what terms, but the Senate does not." Hence, he was for the Norris bill.

Norris had the last word and spoke with deepest emotion. "I realize, Mr. President, that we are defeated. Personally I feel it very sincerely and deeply . . . I felt that before we voted finally on this proposition I wanted to call attention, modestly and briefly, to the fact that the bill that we are now passing [the Underwood-Coolidge measure] is a power bill. There will be no fertilizer produced under it." He had hoped that the matter would go over to the next session "and it might be that in the meantime the great public would crystallize its sentiments in such a way and in such form that no Congress would dare to take the resources of our Government and throw them into the lap of monopoly."

The bill passed, 50 to 30. The title was amended to read, "A bill to provide for the national defense, for the production and manufacture of fixed nitrogen, commercial fertilizer and other useful products for other purposes," and it went on its way to the House of Representatives.

Longworth Takes Command. The victory of the coalition was costly. Before the roll call, Norris charged that an "unseen power," meaning

the White House, had changed ten Republican votes, otherwise the bill would have failed. The majority of the House members were dissatisfied with the fertilizer provisions and resented administration pressure. A minority whose spokesmen were LaGuardia of New York and Hull of Iowa, both Republicans, resented its power provisions. A repetition of the long Senate conflict, which the coalition had to prevent or risk defeat, was in prospect. Strong-arm methods were invoked. The bill was not sent to McKenzie's Military Affairs Committee but remained on the Speaker's desk, a way of avoiding debate until the close of the session when it could be jammed through without adequate discussion—an ancient practice. After only four days, McKenzie moved to disagree and send the bill to conference, but Nicholas Longworth, Republican floor leader, intervened. Would his party colleague postpone the matter a few days? He would. Whereat Garner, Democrat of Texas, gibed, "Then I understand the leaders have not come to a conclusion as to what is to go into the bill?" Longworth replied, "I think that is correct."

Ten days more went by and then suddenly Bertrand H. Snell, chairman of the Senate Rules Committee, moved to send the bill to conference. Democrats agreed with Republicans on this being "the only way to get action at this session." They expressed their willingness to trust the President to ensure fertilizer production. By the overwhelming vote of 187 to 41, the resolution was concurred in and McKenzie, Morin, and Quin were appointed as conferees. The debate was short and proved to be the only one that the House members of this expiring Congress were to enjoy.¹⁴

Norris, McNary, and Smith Are Excluded. When the House action reached the Senate the following day, an incident occurred which again disclosed the bitterness and intensity of the struggle. Millions of dollars were at stake. For generations it had been an almost sacrosanct custom of the Senate to appoint as the members of a conference committee the chairman and ranking members of the standing committee that handled a measure. In this case Senators Norris, McNary, and Smith would have been chosen automatically. But Underwood, to the astonishment of the Senate, moved that the Senate elect Keyes, McKinley, and Harrison. Conservative Smoot at once inquired whether this were not "an unusual" procedure. Underwood admitted as much but held that he was within the rules and that, since Norris and the others were not in sympathy with the bill as passed, members who did approve should be the conferees. This rude violation of seniority and precedent was taken as an insult to Norris. It implied he would

not honestly represent the majority decisions in conference. Since Norris was respected by all for his fairness and honesty, Senators were reluctant to violate their time-honored precedent and offend Norris, McNary, and Smith.

The situation was embarrassing. A long discussion took place. Norris announced that he did not desire to serve as a conferee, "so let us bust this old custom." And when McKellar moved that Norris, McNary, and Smith be named as conferees, each of them announced he would not serve if elected. But the Senate elected them nonetheless by a vote of 35 to 33. All three promptly resigned. Capper and Ransdell refused to serve, and Underwood finally won out with the election of Keyes, McKinley, and Kendrick.

The Senate Rejects the Report. The conference committee rewrote the Underwood bill in many particulars and inserted new matter that was not in the measure as passed by the House or as passed by the Senate. The evident intent was to make the terms more attractive to a private lessee and lessen the chance of government operation. The move was bold and risky since it violated, not a custom, but Senate rule 27, which provides that if a conference committee inserts matter in a report not contained in the bills committed to it the report is subject to a point of order and must be sent back to conference. Ironically enough, this rule, adopted in 1918, had been fathered by Charles Curtis of Kansas when the Democrats were in power. Now, as Republican floor leader, he was under pressure to disregard it and did so.¹⁵

It was now the Senate's turn to delay action. Although the conference report was submitted on February 7, it was not taken up until February 19, and then Underwood instantly called for a vote. But Norris, equally alert, invoked Senate rule 27 and made a point of order against it—and another merry-go-round was on. Norris cited several instances of "new matter." For example, he pointed out that the Underwood bill fixed the annual rental at four percent on the cost of Dam No. 2 and its power facilities, but the conferees had inserted a provision that no interest payments be made on the cost of the locks at Dams No. 2 and No. 3 or on an additional amount to be determined by the President as representing the development's value to navigation improvement.

Norris said that under this provision the figure on which the company would be compelled to pay four percent interest could be reduced from \$45 million to \$28 million, to \$10 million, or to nothing. "There is no limitation upon the President's discretion . . . it is possible that

the lessee would not pay one cent." He insisted that the fertilizer provision had been radically changed. The Ford offer provided for annual production of 40,000 tons of fixed nitrogen for the lease period. The Underwood bill called for the same amount after six years. But the conference bill extended this period to ten years and restored the old joker that the lessee should manufacture the product "according to demand." Beyond that, it authorized the President to substitute the making of phosphoric acid "for not more than 25 percent of the nitrogen production herein specified." To satisfy the pro-Ford members, a section setting up a farm board to govern the marketing of fertilizer which Underwood had omitted was restored to the bill, essentially as contained in the Ford offer. The new matter, violating the rule, was quite acceptable to the power companies. An able attorney, Underwood admitted the presence of new matter but argued that it came within the rule since it was "germane" to carrying out the general purpose of the act. Senator Cummins, president pro tempore, sustained Norris' point of order, remarking, "As viewed by the chair, the rule has been violated." Underwood appealed the ruling to the members of the Senate. This was on Friday, February 20, with only nine days left of the session. Time was of the essence. Yet, debate continued until February 23 when Cummins was sustained by the close vote of 45 to 41, and the bill was sent back to conference.¹⁹

Conferees Still Stubborn. Floor leader Longworth's admission to Garner that "the leaders" were deciding what was to go in the Muscle Shoals bill turned out to be doubly true. The second conference report complied somewhat with the Senate's instruction, but the old, basic objections were retained; Congress still forfeited its right to approve or disapprove any lease the President might make; the right to amend or repeal was still absent. Regulation of power rates and service was still left under jurisdiction of state commissions. The fertilizer provisions were still loosely drawn. In short, too much was left to the President and the Army Engineers to determine to whom and on what terms the Muscle Shoals project would be leased.

It was now Thursday, February 26. The Congress would expire on the following Tuesday. The calendar was full, as usual. Norris told me at the time that he had flatly warned Senator Curtis, Republican floor leader, that if an attempt were made to railroad the Underwood bill in the closing hours he would organize a filibuster which would prevent the passage of important appropriation bills and other "must" legislation. He reported that Curtis agreed that the bill was "not so good" and he would not bring it up. Curtis doubtless remembered

the LaFollette filibuster of 1919. The coalition surrendered. No action was taken. Norris' vain hope had been unexpectedly fulfilled. The Underwood-Coolidge bill died and another Congress passed into history with the 20-year Muscle Shoals problem again unsolved. Congress was still hostile to government operation, private capital was unwilling to offer a reasonable return on the vast investment, and trustworthy scientists would not guarantee that the farmers' fertilizer bill could be cut in half by operating Nitrate Plant No. 2.

The House Requests Another Inquiry. After six years of committee hearings and debates enough information had been collected to enable Congress to solve this "vexatious problem," as the weary McKenzie correctly termed it. But Representative Madden was not satisfied. Two days before adjournment he offered a resolution requesting the President to appoint a commission of three civilians to assemble information on "the best, cheapest and most available means" for the production of nitrates "and to ascertain the most favorable conditions under which this property may be leased" He also requested that the commission advertise for bids and that its findings and recommendations to the President be filed in December at the beginning of the next session of Congress. After a short debate the resolution was overwhelmingly adopted.

A Warning From The South. The last word on Muscle Shoals in this Congress came from Representative William B. Oliver of Alabama. The ideas of the small minority led by Norris for multipurpose governmental development of the Tennessee were beginning to be taken seriously in the south. Oliver declared, "No power company should be permitted to exploit such a dam site for its own local, selfish purposes No private lease should be approved unless it clearly promises a substantial reduction in the cost of commercial fertilizer to farmers and reasonable rates to consumers as to any surplus electric energy." Oliver also advocated control of the river from mouth to source for all purposes in line with the engineering concepts of the conservationists.

The Report of the Inquiry. The members of the Muscle Shoals Inquiry exercised due diligence. The group's findings were presented on December 7, 1925, to the 69th Congress—the third Republican Congress to attempt a solution of the Muscle Shoals problem by leasing the project. Like its predecessors, the Congress was to fail.

President Coolidge's appointments to the board of inquiry, made on March 26, 1925, are of interest. The appointees were:

As chairman, John C. McKenzie, militant sponsor in the House of

the Ford offer, long-time member and later chairman of the House Military Affairs Committee. McKenzie had just retired as representative from Illinois.

Nathaniel B. Dial, Senator from South Carolina, who retired on March 4th after supporting the Ford proposal and the Underwood bill. In private life he was a banker and president of three power companies.

R. F. Bower, who, as the Washington representative of the American Farm Bureau Federation, had studied all phases of the fertilizer problem.

William McClellan, consulting engineer from New York, who in 1933 was to become president and director of the Potomac Electric Power Company, Washington, D.C.

Harry A. Curtis, chemical engineer and professor of chemical engineering at Yale University. In 1923-1924 Curtis was chief of a nitrogen survey made by the United States Department of Commerce. His report, "The Nitrogen Situation," had been made a Senate document on the request of Senator Norris.

The inquiry board selected for its technologist W. C. Waldo, who from 1916 to 1930 was consulting engineer for the Tennessee River Improvement Association and had been the technical right arm of Colonel Worthington in promoting the Underwood bill and the Washburn and Ford offers. Here was a board of experienced, highly qualified men familiar with every phase of the problem at stake. Much was expected from them. All favored private operation. But if anyone anticipated the inquiry would come up with a satisfactory proposed lease or a happy formula, he was quickly disillusioned. There were majority and minority reports. This time the split came not between liberals and conservatives, but between conservatives. Chairman McKenzie expressed his regret to the President that he was "not able to make a unanimous report." He hoped that the inquiry would be of assistance in solving "this vexatious problem." The President sent the report to Congress without a word of comment.¹⁷

There was unanimous agreement in the inquiry board that the entire project should be leased. But "no private offer" had been received "which we could recommend for acceptance." A majority, consisting of McKenzie, Dial, and Bower, held to the old policy of a single lease and would require that Nitrate Plant No. 2 be devoted to fertilizer manufacture with the expectation that the operation would absorb practically all of Wilson Dam's power. If that proved impossible, then

Congress should "provide for immediate operation by a government corporation."

Dr. Curtis and Engineer McClellan sharply disagreed. In a critical minority report they emphasized that the nitrate plant was unfit for cheap fertilizer production and that "under the plan of the majority report the lessee could, and probably would, adopt chemical methods of fertilizer production [by the cyanamid process] requiring little power, and could then sell practically the whole output of power at Muscle Shoals without restriction as to use, and at a great profit to himself." Willing to give private enterprise another try at fertilizer, they recommended the creation of "The Muscle Shoals Board" with "all the power of Wilson Dam and the steam plant" to be held in reserve for two years "for the purpose of manufacturing fertilizer utilizing the equipment of Nitrate Plants No. 1 and No. 2." Any surplus power not so taken must be sold to "applicants who propose using it for the manufacture either of fertilizers or of electro-chemical and electric furnace products of importance in national preparedness." This solution, they thought, would meet the requirements of the Defense Act of 1916.

Evidently, Curtis and McClellan had little faith that the opportunities thus proposed would be embraced, for they recommended a separate lease for the power facilities which would yield the government four percent on the fair value of the properties, estimated at \$42 million.

When Senator Norris read the minority report he chuckled long and loud. He, too, had insisted that power, not fertilizer, was the governing factor and that it was financial folly to commit the whole project to fertilizer production.

CHAPTER XIV

STRENGTH OF THE POWER COMPANIES

Notwithstanding the failure of the inquiry commission to receive a lease it could recommend, when the 69th Congress met and organized for action on December 7, 1925, the Muscle Shoals controversy appeared to be approaching a speedy solution. From the political viewpoint, the time for negotiating a lease with private enterprise seemed propitious. The new Congress had been elected in November 1924 when President Coolidge won by an overwhelming majority. The Republicans also had increased their majority in the Senate from 8 to 16 and in the House from 10 to 59. In addition, they could depend on the customary support of conservative Democrats in respect of the Muscle Shoals issue. Vice President Charles G. Dawes, presiding over the Senate, was an extremely conservative Chicago banker. The House had as its speaker Nicholas Longworth, son-in-law of President Theodore Roosevelt. Longworth bitterly opposed adoption of section 124 of the National Defense Act of 1916 under which construction of the shoals project was authorized.

Above all, just as President Wilson had assumed leadership in 1918 to break a deadlock and expedite the passage of a federal water power act, so now President Coolidge took command determined, as he put it, to "effect a sale to the highest bidder who would agree to carry out these purposes," namely, for production of nitrogen and incidental power. In this effort he had the support of his entire cabinet and notably of his Secretary of Commerce, Herbert Hoover, who had been active in aiding private electrical development. At the time Hoover was chairman of the Northeastern Super Power Committee, composed of federal officials, and the chairman of the public utilities commissions of ten northeastern states. The purpose of the committee was to clear the way for interconnecting all the private companies in these states and thus secure to them the financial benefits of an integrated "super-power system" extending from Boston to Washington. The plan included the acquisition of large blocks of power from the proposed St. Lawrence Seaway project which then had the support of the administration since it was fully expected that the power companies would inherit the power.¹

The nation was recovering from the postwar depression, social

discontent was lessening, and the electrical and chemical industries most interested in the Shoals were rapidly expanding. They had become a political force of the first magnitude and were solidly behind the administration. The electrical industry was rapidly consolidating and the sale of watered securities, an important factor in the stock market crash of 1929, was in full swing. Although the Teapot Dome scandal was still fresh in the public mind, President Coolidge was not held responsible for the scandals that had marred the administration of President Harding.

The Difficulties. This promising outlook for disposing of the Tennessee river plants again proved illusory. The Congress, in fact, remained unchanged. The House Military Affairs Committee and the House majority were still determined that no lease should be made which did not guarantee full use of the plants for national defense and fertilizer production. John M. Morin, the Pittsburgh businessman and friend of labor, had now become chairman of the committee. Senator Norris remained chairman of the Senate Committee on Agriculture and Forestry during the first session. In the second session Norris became chairman of the Judiciary Committee and Charles L. McNary of Oregon, who shared Norris' views, succeeded him as chairman of the Agriculture Committee. By common consent, Norris remained as leader on Muscle Shoals matters. Although the Agriculture Committee acquired two new members, a majority were old veterans in the conflict. It was soon evident that new proposals would fail of approval if they contained the provisions that for six years had caused the rejection of private bids. One of these provisions was low rental for private exploitation of the hydroelectric power. The general public had been dimly aware of the power's worth, but a demonstration was then taking place which brought home to the common man, as a personal matter, its enormous cash value.

An Object Lesson From Wilson Dam. With 3 of its ultimate 18 generators installed, Wilson Dam had begun producing current on September 12, 1925. The Alabama Power Company, which had supplied power for construction of the project, owned the only transmission line connected with the plant and was the only customer available to use such huge blocks of power. The War Department had no alternative but to sell at the company's proffered price. A contract was signed which fixed the price at 2 mills per kilowatt hour, less than half its commercial value; the company asserted that this was the cost of its own production by steam. The government's power along with its own current was then being retailed by the company to domestic

consumers at an average price of 8.5 cents per kilowatt hour. The company's overall average rate was more than 2 cents.

Citizens of Florence, Alabama, living within sight of the dam, were paying a domestic rate of 10 cents per kilowatt hour or 50 times the power cost to the company. This unique object lesson indicating terrific profits was disconcerting to the entire electrical industry. Billions of securities were being sold based on the continuance of existing high rates. Not only the Norris following but others heralded the news of this Muscle Shoals example.

President Coolidge was too good a strategist not to realize the political importance of getting the "vexatious problem" of Muscle Shoals out of the way at the earliest possible moment. The obstacles were real and annoying but seemingly not insurmountable in view of the general situation. The President assumed leadership in a bold attempt to end the controversy quickly.

Coolidge Evaluates the Project. In his annual message read at the opening of Congress on December 8, 1925, Coolidge included the following paragraphs under the heading "Muscle Shoals":

"The problem of Muscle Shoals seems to me to have assumed a place out of all proportion to its real importance. It probably does not represent in market value much more than a first class battleship, yet it has been discussed in the Congress over a period of years and for months at a time. It ought to be developed for the production of nitrates primarily, and incidentally for power purposes. This would serve defensive, agricultural and industrial purposes. I am in favor of disposing of this property to meet these purposes. The findings of the special commission will be transmitted to the Congress for their information. I am convinced that the best possible disposition can be made by direct authorization of the Congress. As a means of negotiation I recommend the immediate appointment of a small joint special committee chosen from the appropriate general standing committees of the House and Senate to receive bids, which when made should be reported with recommendations as to acceptance, upon which a law should be enacted, effecting a sale to the highest bidder who will agree to carry out these purposes.

"If anything were needed to demonstrate the utmost utter incapacity of the national government to deal directly with an industrial and commercial problem, it has been provided by our experience with this property. We have taxed everybody, but we are unable to secure results which benefit anybody. This property ought to be transferred

to private management under conditions which will dedicate it to the public purpose for which it was conceived."

Mr. Coolidge evinced an irritation and impatience unusual for him. The remarkable thing was not his adherence to the old slogan "get rid of Muscle Shoals" or even his recommendation that it be sold instead of leased but his estimate of the value of the properties and the absence of any indication of his awareness of the importance of the Shoals in a comprehensive development of the Tennessee River Basin. His comparison of the market value of the properties to that of a first-class battleship was unfortunate for his cause. The most recent warships that had been launched, equipped, and made fully ready for battle, were the *Colorado*, which cost \$26,981,007, and the *West Virginia*, which cost \$27,025,803. The amounts were mere scrap value when compared with the government's investment of \$150,000,000 for the Muscle Shoals plants.² The attempt to minimize the importance of an expanding project, which Senator Howell had demonstrated would yield a gross income of \$22 million annually to private utilities, did not impress the Congress.

The Snell Resolution. A month passed before Representative Bertrand Snell, chairman of the House Rules Committee, reported on January 6, 1926, House Concurrent Resolution 4, embodying the President's suggestions. The resolution provided that a joint committee of six be appointed to negotiate a lease of the nitrate and power properties at Muscle Shoals "for the production of nitrates primarily and incidentally for power purposes, in order to serve national defense, agriculture, and industrial purposes and upon terms which so far as possible shall provide benefits to the government and to agriculture equal to or greater than those set forth in H.R.518, 69th Congress, 1st Session [the Ford offer] except that the lease shall be for a period not to exceed 50 years." The committee was authorized to report a bill containing a bid by April 1 which would be given a privileged status. The filing date was later extended to April 26.

In urging passage Representative Snell made a brief speech in which he warned that no prolonged discussion was desired. Muscle Shoals was an old issue. Congress was tired of it. The President and the farmers wanted action. Arguments on the merits of the issue could be had on the bill recommended by the joint committee. Interestingly enough, Snell, in private life a paper manufacturer and owner of a power plant, stated that he personally believed power was the dominant factor at Muscle Shoals, as did many others, "but that was neither here nor there." All must yield to the present situation, he said.³

The Military Affairs Committee was not permitted to hold hearings. Speed was the word. Only 90 minutes were allowed for debate. The bill was shot through the House by a vote of 248 to 27 and sent to the Senate. Congressman Garrett of Tennessee, Almon of Alabama, and other Democratic leaders joined Snell in urging passage. The only objections came from LaGuardia of New York and Huddleston of Alabama.

The Senate did not comply with the administration plan that the Snell resolution be approved speedily and without amendment. It was referred to McNary's Committee on Agriculture for consideration along with other Muscle Shoals bills. It was amended and passed some two months later, but during that time the attitude of the Senators was one of intense apprehension. They recognized that Muscle Shoals was still one of the most important subjects before Congress. Coolidge had the votes in a showdown, but members realized they were handling political dynamite.

Although the President had asked for immediate action, the House Rules Committee took nearly a month to make its report indicating the kind of solution desired. Rumors were flying that a deal had been made. But with whom? The utilities? Heavy chemicals? Ford? No one professed to know. Again, it soon became evident that the Coolidge-Underwood coalition was still in operation. The Senator was ill at his farm home 12 miles from the Capitol, but his Alabama colleague, the voluble Heflin, took charge of the resolution in his absence.

A Disconcerting Interlude. Apprehension was heightened by a bold move on the part of the private companies. The Tennessee Electric Power Company and the National Power and Light Company (a subsidiary of the Electric Bond and Share Company of New York) had organized the East Tennessee Development Company and on August 26, 1925, had applied to the Federal Power Commission for preliminary permits to construct 11 dams on the Tennessee River from above Chattanooga to the Cove Creek site where Norris Dam is now located. On December 15 Major Harold C. Fiske, District Army Engineer in charge of that region, held hearings. Rumors were insistent that the plans of the company's engineers were likely to be approved.

Alarmed by this unexpected move, Norris, on January 4, introduced Senate Joint Resolution 35, providing for suspension of the authority of the Federal Power Commission to issue licenses on the Tennessee River until such time as Congress had taken final action on Muscle Shoals. A Senate Agriculture Committee hearing was called for

January 11, 1926. The reaction of political and economic interests to this seemingly reasonable step was both drastic and forceful. Even Norris was surprised: "I did not expect there would be anybody here." Instead, a delegation of some 50 manufacturers, business and utility executives, and others appeared to protest. The objectors were led by Mayor Richard Hardy of Chattanooga, who was accompanied by several senators and representatives.

Norris explained that "a whole lot of permits would interfere" with government planning and construction if his bill for comprehensive mouth-to-source government development (S.2147 introduced January 5) were adopted and that everything should be held in abeyance until at least the disposition of Wilson Dam was determined.⁴ Such a policy did not satisfy the delegation. Several speakers vigorously urged immediate construction of power dams on the upper Tennessee to aid industrial expansion. They emphasized their opposition to government ownership, urged private operation, and held that Norris was proposing unnecessary delay and impeding progress. Senator L. D. Tyson of Tennessee read a letter from his governor, Austin Peay, which illustrated the states' rights attitude. Peay wrote, "We want the permits issued on our sites as soon as possible. It is well known that strong financial interests are asking those permits . . . and what Tennessee wants is the earliest possible development."

As to retail rates, Governor Peay assured the committee: "Our legislature will provide whatever is necessary to protect the public interest insofar as regulation is needed to insure reasonable charges for the power and in any other respect. All we are asking of Congress is to save us from its own interference. The present power act is sufficient for all purposes."⁵

Major Fiske and J. A. Switzer, professor of hydraulic and sanitary engineering at the University of Tennessee, were expert witnesses. Both strongly approved the Norris concept of harnessing the entire Tennessee River for all purposes but held it could be done by private capital and that the general plan of the Army Corps of Engineers would not be interfered with if the pending permits on the upper Tennessee were granted—the Federal Power Commission would be in control.⁶ In opposing the Norris resolution the major was not speaking out of turn. As he testified a letter expressing the same view lay on the chairman's table from the Federal Power Commission signed by Dwight F. Davis, chairman, Secretary of War; Hubert Work, Secretary of the Interior, and Secretary of Agriculture W. M. Jardine. The letter stated, in effect, that adoption of the Norris resolution "would

be distinctly detrimental to the interests of the United States as represented in its power development at Muscle Shoals We recommend that it not be passed."

A Joint Leasing Committee Is Created. The administration won and so did Norris. His resolution was not reported, but the Federal Power Commission issued no permits. This incident over, the committee gave two days to the Snell resolution and approved it, 11 to 5. It was reported not by McNary or Norris but by Heflin, February 3, without change or recommendation. Beginning on March 1, the Senate floor battle on the Snell resolution continued for a whole week. Its supporters, with Heflin leading the fight, and aided by Bruce of Maryland and Harrison of Mississippi, offered no new evidence and contented themselves with emphasizing the administration's desire for speed. They were troubled, however, by the opposition's steady barrage, voiced forcefully by Howell, that the big private bidders all looked upon Muscle Shoals as primarily a power project, that the attempt to make it a fertilizer proposition was a hoax, and that anybody, who sincerely believed such a claim was misled.

The opposition declined to be restrained. McKellar and Cotton Ed Smith, who had supported the Ford offer, abandoned hope of receiving a satisfactory offer and introduced individual bills for government operation. Even George, of Georgia, dubbed the present move as a utility "grab."

Angered, Heflin heatedly declared that such assertions were untrue and that the power and fertilizer trusts were opposed to the Snell resolution. Pausing, he observed that Senators McKellar and Smith appeared to be amused by these statements. Both Senators smilingly responded, "We are." On March 14, 1926, the Snell resolution finally passed. A committee was named to negotiate a lease for the Shoals project. Vice President Dawes' appointments were freshman Senator Charles S. Deneen of Chicago, Senators Sackett of Kentucky and Heflin of Alabama. Speaker Longworth named John M. Morin of Pennsylvania, W. Frank James of Michigan, and Percy E. Quin of Mississippi.

The Committee Organizes for Action. The activities of the joint committee constitute a significant part of our history since this was the most strenuous and final effort of the Harding-Coolidge administrations to reverse the Wilson policy of government operation and transfer the Muscle Shoals project to private management. It again spotlights the political impasse that scientific and conservation necessities had brought about.

The committee met promptly and organized on March 15, 1926, with Senator Deneen as chairman and Representative James as vice chairman. Having but a short time to fulfill the enormously important and meticulous assignment of negotiating a private lease or leases, it held closed sessions and thereby earned for itself much unjust criticism for "secrecy." It sent out calls by telegram and letter to 53 utility and manufacturing concerns; April 10 was the deadline set for reception of bids. A few days were spent with experts—including army engineers and the veteran J. W. Worthington of the Tennessee River Improvement Association—in studying the Ford offer (H.R.518) to establish standards by which to judge bids.

Secretary Hoover Lends His Aid. On March 27th, members of the Federal Power Commission and Secretary of War Davis, Secretary of Interior Work, Secretary of Agriculture Jardine, and Secretary of Commerce Herbert Hoover were summoned into conference. Hoover was evidently the most competent to give advice, not only as a cabinet officer but as a mining engineer. He had become deeply interested in the progress of the electrical industry. In addition to serving as chairman of the Northeastern Super Power Committee, he had been for several years the outstanding speaker at the annual conventions of the National Electric Light Association and allied groups.

The record reveals that the expressions of fact and opinion at this closed conference were refreshingly frank. The difficulty if not the impossibility of obtaining a single bidder to undertake both fertilizer and power production, as defined, was admitted by all four secretaries. The upshot of the entire discussion was that if quantity manufacture of fertilizer was to take precedence it must be heavily subsidized. Secretary Jardine insisted that the hope for cheap fertilizer lay in supplying it to farmers in "concentrated form"; one reason was high freight rates. He was blunt: "The private concerns will not do it. If it is done it will have to be done by the Government." He thought, however, that "if the power companies want it under your scheme they should be required to give enough power to guarantee the manufacture of fertilizer." He meant subsidizing fertilizer.⁷ Secretary Hoover remarked, "Under this plan they could not only give power for nothing but they could give power with a bonus." He estimated that "the plant as it stands today is worth to any lessee as a power business not less than \$2,500,000 a year net to the Government and as a result of development of the upper river it might be worth a million more." He said, "None of these bids have given the government any benefit whatever of that great increase that is going to come sooner or later."

Replying to a query from Representative James concerning Major Burns' testimony that in five years Nitrate Plant No. 2 would not be needed for war preparedness, Secretary of War Davis said: "That is the feeling in the Ordnance Department. I have talked with General Williams along the same lines."⁸

An Advisory Board Is Created. Chairman Deneen asked for technical help in evaluating bids. Secretary Hoover, who had most to say and clearly directed the course of the conference, suggested the creation of an advisory board composed of experts in the four departments. On his recommendation, the following were appointed: Brigadier General Edgar Jadwin, assistant chief of engineers, United States Army; Paul S. Clapp, Secretary Hoover's assistant on power and utility matters; Dr. S. C. Lind, associate director of the Fixed Nitrogen Research Laboratory; Dr. F. C. Cottrell, Director of the Laboratory; and C. A. Bissell, representing the Bureau of Reclamation, Department of Interior. In addition, five army engineers were called on to aid the advisory board.⁹

Thus organized, the joint committee settled down to work. By noon of April 10, the hour set for receipt of proposals, ten bids had been received. Only three came within hailing distance of the stipulations of the Snell resolution. One from the 13 newly organized Associated Power Companies of the South, one from the American Cyanamid Company through its subsidiary, the Air Nitrates Corporation, and the third from the Union Carbide Company. All of the companies were apparently in strong competition with each other. The electric utilities won the contest to the astonishment of the fertilizer contingent in Congress. For three years they occupied the center of the stage as Ford had monopolized it up to that time.

Power Companies Enter the Arena. A clear understanding of the nature and impact of the Associated Power Companies requires a review of previous efforts of the private utilities to acquire Muscle Shoals, noted only briefly heretofore.

The 1926 bid was the third effort made by the Alabama Power Company and its allies to lease the Shoals since Secretary Weeks had called for bids in April 1921. The refusal of the companies to make an offer and their gratuitous advice that construction of Wilson Dam should be abandoned because neither private capital nor the government could afford to complete it had been a tactical blunder. The unexpected bid by Ford had forced then to execute a swift right about-face and make competing bids.

The first of these offers had been made on February 15, 1922, by

the Alabama Power Company, which since 1906 had urged government development of Muscle Shoals for navigation with itself as a partner to secure the power.

The governing terms of this first bid in competition with Ford were as follows:

The company would finance the completion of Wilson Dam at an estimated cost of \$26,354,000 on which the government had already spent \$17,000,000. It would purchase for \$5,000,000 in five annual payments the Warrior steam plant, the steam plant at Nitrate Plant No. 2, and other power facilities. As to fertilizer, it would furnish free 100,000 horsepower of "secondary" power estimated to be available 82 percent of the time for fertilizer production at Nitrate Plant No. 2.¹⁰

The second attempt was made two years later during the first session of the 68th Congress. On January 15, 1924, a few days before the House Military Affairs Committee was about to report favorably on the Ford offer, Secretary Weeks received a more liberal proposal. This time it came in the form of a joint bid from the Memphis Power and Light Company, the Alabama Power Company and the Tennessee Electric Power Company, which served Chattanooga and several other municipalities in Tennessee. Together with other companies not named, they proposed to form a corporation with a capitalization of \$10 million to lease for 50 years under the Federal Water Power Act the steam plant and Wilson Dam when they were completed. The corporation would pay annual rentals of \$300,000 for the first seven years; \$1,500,000 for the next four years, and \$2,000,000 annually thereafter. Should Dam No. 3 be constructed, the company would lease it on similar terms. Also it was agreed to create a fund of \$1 million to be "used in electrochemical research in the interest of agriculture and national defense," controlled by governmental departments. The corporation would also agree to supply at actual cost up to 60,000 horsepower of energy to be used solely in the manufacture of fertilizer.

The three companies amended their offer nine days after filing it by agreeing to organize a \$5 million corporation to make fertilizer at eight percent profit. This company would lease the nitrate plants for 50 years. Power would be supplied at cost and, after a preliminary period the corporation would "produce annually fertilizers which contain 50,000 tons of fixed nitrogen as rapidly as there may be a commercial demand therefor at the prices herein provided for; such fertilizers to be in the form of ammonium phosphate, ammonium sulphate or other concentrated nitrogen fertilizers."¹¹

The Tour de Force of 1926. The proposals made to the joint commit-

tee by the 13 Associated Power Companies in a virtual tour de force to gain possession of Muscle Shoals properties were the third power company bid. Concurrently, the same interests were applying for licenses on headwater power sites. If both efforts were successful, it would have given private power interests control of the entire river from below the Shoals to its headwaters.

To impress on Congress the character and force of this drive and who was behind it, Senator Norris had inserted in the record and placed on the wall of the Senate a chart prepared for him by Marion H. Hedges, research director of the International Brotherhood of Electrical Workers. The charts showed all but one of the associates were, through the holding company system, ultimately controlled by the Electric Bond and Share Company of New York and, in turn, by the General Electric Company.

At the conclusion of its labors the joint committee had before it two bids from which to choose, both of which had been revised during the negotiations:—the bid of the Cyanamid Air Nitrates Corporation and the bid of the Associated Power Companies. After considerable bargaining, the latter was recommended for acceptance by a majority of the committee.¹²

Terms of the Associated Bid. The Associated Power Companies had, under Florida laws, organized two companies that would lease the Muscle Shoals properties for 50 years: the Muscle Shoals Fertilizer Company (Louis C. Jones, vice president) and the Muscle Shoals Power Distributing Company (Thomas W. Martin, president). The power company would own the common stock and control the fertilizer company.

The fertilizer company agreed to lease both nitrate plants at an annual rental of \$1,000 and at its own expense to make additions thereto and construct facilities adapted to the production of fixed nitrogen by the synthetic ammonia process as well as to the production of phosphoric acid and other ingredients necessary to a balanced fertilizer. Capital up to \$20 million would be advanced by the power company. A farm board similar to the one set up in the Ford offer would have certain powers over production and sale. Profits likewise would be limited to eight percent. Within two years from date of lease it would produce concentrated fertilizer containing 5,000 tons of fixed nitrogen. After that, in response to market demand, it would install more units and increase production from time to time up to the total capacity of Plant No. 2, 40,000 tons of fixed nitrogen for the remainder of the lease period. The company was given preferred rights to use

of needed power. The price would be fixed by the Secretary of Agriculture. However, if and whenever fertilizer containing in excess of 5,000 tons of nitrogen remained in storage unsold, further manufacture would be suspended until such excess was sold. In any case there would be no forfeiture of the control of power.

The Muscle Shoals Power Distributing Company would agree to lease the existing power properties under the terms of the Federal Water Power Act and would pay the following rentals: \$300,000 a year for the first 6 years, \$1,200,000 annually for the next 6 years, \$1,500,000 a year for the next 6 years, and \$2,000,000 a year for the remaining 32 years. If the United States should elect to construct Dam No. 3, the company would lease the power. If in addition it should elect to construct Cove Creek Dam and other headwater storage dams, the company would lease the power and also pay for the additional capacity these dams would add to Dam No. 2 at the rate of \$20 per horsepower but not to exceed \$1,200,000. Operation of the dams for navigation would be regulated by the Secretary of War. Securities issued would be regulated by the Federal Power Commission but electric rates to consumers would be regulated by state commissions.

The Competing Bids. The Cyanamid Company-Nitrate Corporation bid was complicated. As a prerequisite to fertilizer manufacture, the government was required to equip Wilson Dam to full power production (adding 10 generating units to the 8 installed), construct Dam No. 3 with an installed capacity of 200,000 horsepower, and connect the two with a transmission line. In addition the government would direct the Federal Power Commission to issue to the company 50-year licenses for Cove Creek and other dam sites. The company would pay the government four percent on its investment and \$55,000 annually for maintenance and repair of the dams.

The company agreed to install machinery in Nitrate Plant No. 2 to manufacture a plant food called Ammo-Phos and by the third year offer for sale a quantity of the production containing 10,000 tons of nitrogen. If and when the corporation "succeeded in selling the full production of this first unit through three successive years then the corporation would progressively install other units up to 40,000 tons of nitrogen" and beyond that if the sales warranted. The Cyanamid Company would guarantee air nitrates production. A farm board was provided as in the Ford offer. Surplus power not used at Muscle Shoals would be disposed of by the lessee for the "purpose of distribution" under federal and state laws. (This provision was vague.) Suspension of fertilizer production would not forfeit the power lease.

The Joint Committee Reports. The joint committee reported April 26, 1926, as instructed. Like the inquiry board, it was divided in opinion. A majority report recommending the Associated bid was signed by Chairman Deneen, Sackett, Morin, and Quin. Heflin did not sign. Vice Chairman James filed a minority report. Duplicate bills for acceptance of the Associated bid were introduced by Deneen in the Senate (S.4106) and by Morin in the House (H.R.11602) directing the Secretary of War to execute leases.

Reception accorded these bills was from the start tantamount to a rejection by both chambers. In the House it was referred to the Committee of the Whole and went on the calendar, where it died. It was never debated. On June 21 Representative Almon of Alabama was given 15 minutes to explain his opposition. That was all.¹³

In the Senate Deneen failed to get immediate action on his bill. When it came up three weeks later on May 18, 1926, several senators called out, "Let the bill go over," and over it went to the second session in December. On December 13, early in the session, Deneen again sought action and the Senate again declined to consider. McNary had let it be known that he would move to refer the bill to the Committee on Agriculture of which he had just become chairman. His motion would prevail, so why waste time? But the Senate acceded to Deneen's request to deliver his prepared speech, and Sackett followed with a short dissenting address. No discussion. The chamber turned to other matters.¹⁴

Minority Views of Mr. James. Manifestly, the White House had collided with a brick wall. Hostility had mounted since adjournment while nationwide discussion had been in progress. The reasons were evident. At the outset a majority of the House, committed to fertilizer production, was disappointed. Members wanted to know why a Coolidge commission directed to consider fertilizer first and power generation as "incidental" had permitted the power companies to win. Vice Chairman James informed them in a minority report. He was believed because he was respected for his integrity, courage, and knowledge of the subject since he had been a member of the Military Affairs Committee for ten years and was perhaps the most earnest student of the question.

In the most sensational document that had appeared since Norris' denunciation of the Ford bid, James charged improper collusion between the power companies and the advisory board while the joint committee was attempting to negotiate a lease. This was accompanied by a sarcastic review of the history of Alabama Power Company's

dealings with the government on Muscle Shoals. He captioned the section, "Ways That Are Dark and Tricks That Are Vain." As to secret team play, he wrote: "I have heard of 'grapevine diplomacy' but never knew how effective it was until I served as a member of the Joint Committee. . . . If the advisory board on a certain day had decided to report to us that a certain flaw had been found in the power companies' bid, 'mental telepathy' conveyed the idea to the power companies so that they always had the necessary changes sent in (correcting such flaws) even before the advisory board had been able to place the proposed changes before us."

Quite as disturbing because of its political import to members up for reelection was James' disclosure that two Washington representatives of the American Farm Bureau Federation had appeared before the committee, made virtually the same charges, and expressed their "indignation" at the possibility that the Associated bid might be accepted.¹⁵

James charged that vital provisions of the measure were deceptive. There was no guarantee of fertilizer production as professed. The national defense pretension was a mockery. There was no forfeiture of the lease if fertilizer manufacture was abandoned. The return on investment was inadequate. He concluded: "Furthermore, the people of the country can now understand that the Power Trust, which is now in charge at Muscle Shoals and now operating our power plants there, is really in control of the situation. When the people ask us just when we are going to use our property to free the country from its dependence upon Chile for nitrates, and when we are really going to have some cheaper fertilizer made at Muscle Shoals for the farmers, as we promised them for the past ten years, we can only reply, 'Not till the Power Trust permits us to do so.'"¹⁶

More Surprises. When the hearings were published later it was found that on April 10, the day set for closing bids, the president of the Union Carbide Company had appeared before a closed session of the joint committee and recommended the acceptance of the bid of the Associated Power Companies, his supposed rival. He explained to a surprised committee that an agreement had been reached whereby if Associated were successful it would sell power to Carbide for its use in large chemical plants to be built at Muscle Shoals. But if Associated failed, Carbide would press for the acceptance of its offer. The exact terms of this deal were not disclosed until two months later, when, on June 21, Deneen submitted the documents in compliance with a resolution introduced by McKellar. They showed that Carbide

was to get up to 50,000 horsepower of primary energy at \$17 per horsepower, and a grant of land for its plants. In turn, Carbide would aid Cyanamid with the use of its patents and technical staff.¹⁷

It was also revealed that Associated had pledged upwards of \$5 million for fertilizer experimentation and forfeiture of the power lease if the company failed or ceased making fertilizer. But neither of these items were mentioned in the bill.

The Senate Buries the Bid. No action was taken by the Senate until February 25, 1927, six days before adjournment, when Chairman McNary made a motion to have the Associated bill referred to his Committee on Agriculture. The brief debate that followed is noteworthy only because of statements made by Deneen and Sackett. Deneen was now in a most embarrassing position in respect to the joint committee. Sackett was advising rejection. Heflin was supporting the Cyanamid offer. James was fighting him, and Morin and Quin were eloquently silent.

In evident self-defense, Deneen laid responsibility for the situation squarely on the White House doorstep, assuring the Senate that "the Joint Committee did not vary a hair's breadth from the recommendations made by the Advisory Board of disinterested experts, supervised by the secretaries named. The Joint Committee followed the government; so we have back of the judgment of this committee the judgment of the experts on the Advisory Board and their associates, who followed the testimony, analyzed it for the Joint Committee, and discussed the bids fully with the Joint Committee as a whole and with its individual members."¹⁸

Deneen's frank admission did more harm than good to the utilities' proposals. It served to confirm James' charges that the terms of the Deneen bill were influenced by the Army Engineers and, by inference, by Secretary Hoover who had suggested the creation of the advisory board, and whose assistant, Paul Clapp, had taken a prominent part in its activities.

Sackett pointed out that under the lease the grand total the company would pay for power would be only \$83,800,000 for 50 years. It was worth much more. He was opposed to the bill and wanted to give the joint committee another chance. Underwood wanted to amend the bill. He cried out, "If the bill goes back to the committee it is dead. It is not only dead but the earth is poured on the grave."

McNary won, 49 to 35. The bill was "sent back," and it expired along with the demise of the joint committee. Thirty-two Republicans,

16 Democrats, and 1 Farmer Laborite voted for burial; 13 Republicans and 22 Democrats voted against it.

President Coolidge thus failed to get early disposal of Muscle Shoals by his own party. Congressman James had spoken truly when he had written in his minority report: "If they [the private utilities] believe that there is any chance of this offer passing Congress they must agree with Barnum that 'One is born every minute.' "

THE CHEMICAL BARRAGE

Following the 1926 rejection of the Associated Power Companies' bid for Muscle Shoals, even though recommended by President Coolidge's joint committee, Associated's chief competitor, the American Cyanamid Company, made a dramatic effort to gain acceptance of its proposal. American Cyanamid had sought possession of the shoals' hydroelectric power ever since 1906. The company had built Nitrate Plant No. 2 in 1918 as a government war plant. The work had been performed under the dynamic leadership of its founder and president, Frank S. Washburn, who died in 1922 at the age of 62, disappointed over his failure to obtain a peacetime lease and fulfill his life-long dream of founding an electrochemical empire on the Tennessee River. His successor, William B. Bell, a forceful and able attorney, vice president of the company and former counsel to the Duke interests, renewed the effort before the joint committee in 1926 in association with the Union Carbide Company. It was agreed that Union Carbide would receive a large block of power and land for its own purposes. The combined assets of the two giant concerns then totaled many millions, controlling many subsidiaries and marketing some thousands of different chemical and electrochemical products. To them the shoals was a prize of the first magnitude.

At the start, Bell's chances of success appeared promising. President Coolidge, irritated by delay, was extremely anxious to dispose of the properties. The American Farm Bureau Federation stood ready to battle with him and had influence at the White House. Bell's offer also had the support of the Tennessee River Improvement Association, headed by a powerful political figure, Claudius H. Huston. Bell soon let it be known that his chief counsel on constitutional matters in drafting his bill was Charles Evans Hughes, who in 1916 had resigned as Associate Justice of the Supreme Court to become Republican nominee for the Presidency.

A revised draft of the Cyanamid proposal was introduced on January 27, 1927, by the brilliant senator, Frank B. Willis of Ohio, and in the House by Martin B. Madden, Republican of Illinois, popular and influential chairman of the Appropriations Committee, close adviser to

the President, and a top leader in his party. (The bills were S. 2786 and H.R. 8305.)

Provisions of the Bill. The Willis-Madden bill did not authorize an outside agency to negotiate a lease but was drafted as an actual contract between the Secretary of War for the United States and the American Cyanamid Company and its subsidiary, the Air Nitrates Corporation. It provided a fifty-year lease of all existing properties except navigation locks. The government was required to equip Wilson Dam to full power capacity, construct Dam No. 3 and the Cove Creek Dam likewise to full power capacity, and connect the three with high tension transmission lines.

In return the company would pay four percent interest on the government's investment plus \$55,000 annually for maintenance. The company would also provide a sinking fund, which when reinvested by the government at compound interest would return to the United States in cash the entire investment at the end of 100 years. The controversial Nitrate Plant No. 2 would be remodeled for the manufacture of Ammo-Phos, the new plant food. Within three years a sufficient quantity would be made to contain 10,000 tons of nitrogen. After that, if sales justified the corporation would progressively install other units to produce 40,000 tons of nitrogen or more annually. Profits were limited to eight percent. A farm board was set up as in the Ford offer. All surplus power not needed for fertilizer purposes could be utilized by the corporation for making its own products or sold to utilities or others at its discretion.

It will be noted at once that the two basic guarantees, the lack of which had helped defeat all previous bids, were not included—full continuous production of fertilizer and surrender of the lease promptly if and when discontinued. The House committee held extensive hearings on the bill in a strenuous effort to close a lease before the expiration of the 69th Congress. It virtually pleaded with Bell to agree to surrender the lease if the manufacture of fertilizer was discontinued, but in vain. The offer went over to the next Congress.

The Slemple Bill—Final Hoodwink. Concurrently with hearings on the Cyanamid Company bid, B. Bascom Slemple, a Washington lawyer who had just resigned as secretary to President Coolidge, and Augustus O. Stanley, ex-governor and former Senator from Kentucky, appeared before the House Military Affairs Committee in behalf of a bill that received widespread publicity and created a temporary sensation.

Introduced by Representative B. Carroll Reece of Tennessee H.R. 16396 embodied the proposal of the recently formed Farmers' Federated

Fertilizer Corporation, which sought a 50-year lease of the Muscle Shoals project. For obvious reasons, the bill was promptly dubbed the Slemple Bill. Congress and the public were informed that a group of farmers and farm organizations, disgusted over the delay caused by "politics," had come upon the scene determined to get prompt action. Given a lease, they would, as the publicity proclaimed, make and sell fertilizer at cost, pay more rentals for the power than any bid yet made, amortize the entire investment, relieve Congress of making any further appropriations.

The skeptical committee, however, soon discovered that the federation was composed solely of three ex-Secretaries of Agriculture from the states of Kentucky, Ohio, and Kansas, who owned farms but were not "dirt farmers." The real backers were Ellis L. Phillips and G. W. Olmstead, consulting engineers of New York City. Refreshingly frank, Phillips testified that he was 15 times a millionaire and an official of several power companies. He would finance the scheme by selling stock—\$30 million worth or more, deriving his profits from the manufacture of unnamed byproducts and the sale of surplus power. If the fertilizer venture proved unprofitable, he would quit but would not forfeit the power lease. He would sell his fertilizer wholesale at cost to a farm board, which must shoulder the responsibility of retailing to farmers. Amortization of the \$130 million investment was also transferred to the farm board, which during the 50-year lease period would pay into the United States Treasury annually a sum which would more than liquidate the investment at the end of 100 years. The committee spent a good deal of time in analyzing these and other ridiculous features of the bill, which were rejected and given no further consideration. It was an absurd and self-revealing attempt to hoodwink Congress and the country and was an appropriate anticlimax to years of negotiation.¹

A Wearied Committee Warns Bidders. At this point the attitude of the Military Affairs Committee underwent a radical change that constituted an important landmark in the history of Muscle Shoals. After listening patiently to Phillips and Bell and finding the usual loopholes in their bids, the committee declined to waste further time, yet was hopeful of obtaining a private lease. On February 2, 1927, a subcommittee, with Mr. James as chairman, was authorized to negotiate with applicants and ascertain if they would agree to certain specified conditions. If not, the subcommittee was directed to reject the bids and recommend future action.

The conditions were that the government should remain in absolute

control of the entire project for defense purposes and that Nitrate Plant No. 2 would be kept in good condition; that a lessee should make and sell fertilizer in peacetime; that the entire project would be leased as a unit; that if fertilizer remained unsold the lessee could temporarily discontinue its manufacture but give profits from power to the government until fertilizer production was resumed; and that the power lease would be forfeited upon failure to produce 40,000 tons of nitrates a year.

These directives were followed by James but to no avail. The subcommittee report was unanimous in rejecting the Phillips and Bell bids. This action was reported to the House on March 3, 1927, by James, who also presented two committee recommendations. First, the committee wanted the Federal Power Commission advised that no preliminary permits should be issued to private capital at Cove Creek or other points on the river until after the expiration of the next session of Congress. "Were the Federal Power Commission to grant a preliminary permit at Cove Creek it would in my opinion absolutely prevent us from getting any kind of acceptable bid from any private bidder," James told the House. "More than that, if the United States had to operate Muscle Shoals itself it would be seriously handicapped if it did not own Cove Creek Dam."

Secondly, the committee proposed to wait until the 70th Congress met in December and if an acceptable bid had not then been received "this committee should give the matter of operation at Muscle Shoals by a Government corporation full and careful consideration." To this James added: "Private bidders do not seem to understand that our committee cannot be fooled into reporting out a bill which only pretends to carry out the intention of the National Defense Act and in reality makes Muscle Shoals a power proposition."²

The Cyanamid Drive Persists. The new Congress—the 70th—met and organized December 5, 1927. The Republicans were in control with reduced majorities. The committees in charge of Muscle Shoals showed little change. No new proposals to lease the project had been received. The May warning had been ignored. The House Military Affairs Committee prepared for the next act in the drama—"full and careful consideration" of government operation. The Senate had already done so.

Cyanamid's forces were not through and were still hopeful. The professional lobby was discredited, but since adjournment in May the powerful American Farm Bureau Federation had been conducting a nationwide campaign on their behalf. Some 15,000 newspapers and

magazines of various kinds were notified that a postcard request would bring, without cost, a series of illustrated articles telling the truth about the Cyanamid offer. Senator Willis and Representative Madden had again introduced their bills (S. 2786 and H.R. 8305). The fireworks shifted from the House to the Senate.

Senator Willis Explodes. When the Senate Committee on Agriculture (McNary of Oregon was now chairman) met on January 24, 1928, to consider Muscle Shoals legislation, Senator Willis appeared, without invitation, and in a 4 minute talk literally read the riot act to his colleagues. Delay on the question had become "little short of a national scandal," he heatedly told them. The cyanamid process was not obsolete and, no matter what the committee thought, he wanted his bill considered and the Muscle Shoals question settled at this session of Congress. Declining to answer questions, he stormed out, but an undisturbed committee smiled at this unusual breach of senatorial courtesy. The gentleman from Ohio was an active candidate for the presidency and the farm vote was important.

The appearance of Chester Gray, Washington representative of the Farm Bureau Federation, touched off a sensational encounter with Norris, which, in its effect on Congress and the public, nearly equalled Representative James' blast at the Associated Power Companies' offer in the preceding Congress. Norris charged that the Cyanamid bid was a power grab in disguise and that Gray in his testimony and his news releases had not told the whole truth. Gray vigorously denied this. Then he was challenged by Norris as to whether either he or the Cyanamid Company, if granted a 50-year lease free, without rentals, without taxes, and supplied with power at cost, would agree to produce fertilizer at Plant No. 2. Gray retorted that the proposition was absurd. The usually mild Norris was plainly angered. So was Gray.

Norris demanded to know how much the propaganda drive for Cyanamid was costing the Federation? Gray did not know; but countered by asking how much the propaganda for the Norris bill was costing? The Senator retorted that he had spent five or six thousand dollars of his own money. "Who pays your bills?" asked Norris. "A local agency which prints and distributes our releases and the Farm Bureau 'cooperatively,' " was the reply. That was all Norris was able to discover.

Two years later a Senate lobby investigation disclosed that the Cyanamid Company and Union Carbide had jointly footed the Farm Bureau bills to the extent of \$7,000. Further, Gray admitted that it

was the custom of the federation to permit private interests "when going our way" to finance such propaganda ventures.³

The committee took no more testimony on the Willis bill, briefly reviewed the Norris compromise bill for public operation which it had reported favorably to the previous Congress and approved it again. The companion Madden bill met the same fate in the House. In a floor speech on May 9, 1928, Representative James explained why the Military Affairs Committee finally declined to recommend it. From this speech it appears that the committee was so hostile to government operation that it was willing to grant Bell's power demands provided he would undertake quantity fertilizer production and agree to return the power facilities to the government if he failed.

The Congressman related at length the efforts of Madden and himself over many months to induce Bell to include a satisfactory recapture clause. When Bell finally refused, Madden withdrew his support of his own bill. Announcement that the outstanding proponent in the House of a private lease had turned against the plan he once sponsored, when he became convinced it was a disguised power grab, helps to explain why the House turned to government operation.⁴

Why the Cyanamid Offer Was Rejected. While lack of a recapture provision was the over-riding cause of the House rejection of the Cyanamid offer, there were other provisions so grave that Norris declared: "It would be the greatest donation, the greatest subsidy by the government of the United States that has ever been given to any individual or any corporation In my opinion it is absolutely the worst bid of any that has ever been made from the standpoint of our government."⁵

This opinion was based on a factual analysis of the bid by O. C. Merrill, executive secretary of the Federal Power Commission, whose statistics in such cases were seldom challenged and who was commended by Senator Norris on the floor for his fairness and accuracy. A comparison of Merrill's expert analysis and of the arguments advanced for acceptance of the bid and the claims made for it by the Farm Bureau Federation in its publicity reveals numerous discrepancies. For example, the Farm Bureau emphasized that four percent interest would be paid on the total investment. After deductions, the true figure was only 2.6 percent. The Farm Bureau had asserted "there is only about 345,000 horsepower" available, but an engineering analysis showed the new installation required by the bid would total 1,200,000 horsepower.⁶

Back of Merrill's devastating memorandum lay 20 years of study of

the power problem. In this situation he abandoned caution and made statements in direct conflict with the attitude of many of his superiors. He wrote: "It is apparent, therefore, that the primary purpose of the companies making the offer is not to produce and sell fertilizer but to secure control for their own purposes of the largest block of cheap power now available anywhere in the United States." Hence, he declared: "If to secure such private operation it is necessary [to agree to such stipulations] it would seem time for the United States to abandon efforts in this direction and experimentation on a commercial scale would demonstrate the possibilities of utilization of the nitrate properties, where it could negotiate a business deal instead of sitting in on a poker game as at present."⁷

Congress itself had arrived at the stage of irritation and at long last turned to public operation enacting a modified form of the Norris compromise, which President Coolidge pocket-vetoed. Meantime, another farce deserves attention.

A Belated Coup Fails. Like the power corporations, heavy chemicals failed to capture Muscle Shoals power, but Bell of Cyanamid was a determined man. One year after Congress had ordered government operation and was waiting for the Supreme Court to decide its validity, he sprang a sudden, unexpected maneuver to restore confidence in his good faith and win the prize. Basically Bell had lost out because of his refusal to agree to surrender of his lease if he discontinued making fertilizer. To remedy this, on January 19, 1929, he sent the House Military Affairs Committee a 15-page amendment to the Willis-Madden bill, claiming it provided an absolute guarantee of such surrender. The amendment was extremely involved. Chairman Morin and a majority of the committee held it abortive, refusing to report it, but B. Carroll Reece of Tennessee, on a day when the chairman and ten members were absent, had the bill reported favorably. This was on February 16, 1929, and although the validity of the action was challenged, Speaker Longworth ruled with Reece, and the bill went on the calendar.

A week later, Morin, acting for a majority of the committee, made a report on the whole history of the bill (H.R. 8305).⁸ He called it "an unwise contract," which had been rejected five times. He showed that the government would have to spend \$88 million in addition to the \$127 million already spent on the project and from \$40 million to \$50 million more to recover the properties. He commented that under the new recapture clause "the Congress, the Secretary of War, and members of the judiciary, including the United States Supreme Court are required to comply with a maze of specific detailed conditions, each

within stated limitations of time, in order that the United States may protect its proper rights. It is submitted that this unprecedented procedure required of the United States is beneath the dignity of the sovereign."

Thus, in his last act before retiring from Congress, Morin turned Bell's effort into a boomerang. Confidence in the good faith of the Cyanamid company was so seriously impaired that although the bill was introduced in the next Congress it was never again given serious consideration. °

THE NORRIS BILLS AND PUBLIC OPINION

After four years of study Senator Norris had come full circle in his conception of what use should be made not only of the Muscle Shoals project but of the entire Tennessee River and its tributaries. In 1922 and in 1924, he introduced in Congress measures that called for partial development by the government. But on January 5, 1926, Norris introduced a bill (S.2147) for multipurpose development of the watershed which would provide for national defense, maximum navigation, power, flood control, and also experimental production of cheap fertilizer. Built by the Army Engineers, the project was to be transferred to a government corporation for management.

Keeping our bearings on the evolution of national policy, we should know that the bill embodied the recommendations of Teddy Roosevelt's Inland Waterways Commission of 1908 and that it was the only one of its kind presented in Congress between the Newland's bills of 1913-19 and the Tennessee Valley Authority bill of 1933. It reflected the Senator's personal views but the Agricultural Committee and the Congress would not embrace so comprehensive a plan.

Time was running out. The long delay in settling the issue was denounced as scandalous. The Senate and House were at loggerheads on power and fertilizer. Congress was restive. Anything could happen.

The Compromise. At this juncture Norris, McNary, and a majority of the Committee on Agriculture decided on a bold compromise. They would say in effect to the House, very well, if you will agree to government production of both fertilizer and power, we will agree not only to continue research but to operate Nitrate Plant No. 2 at full blast and try the cyanamid process until it is demonstrated who is right in this matter of quantity production. This challenge was embodied in a bill (S.J.Res. 163) introduced by Norris and reported favorably on February 26, 1927, five days before the end of the 69th Congress. The bill was introduced in the Senate as the House committee was informing bidders that if a satisfactory offer were not made it would consider government operation when the new Congress met.

The compromise bill was amended and passed despite the opposition of Coolidge and the Republican and Democratic right wings. For

an understanding of the cause of this sharp reversal it is necessary to look beyond Washington to what was happening elsewhere.

The Changing Climate. Our industrial chemistry had caught up with Germany. The "Haber Process" of producing air nitrates was in use, displacing the cyanamid process installed at Nitrate Plant No. 2. Government laboratories were revolutionizing old ideas regarding fertilizers and not all of Wilson Dam power would be needed for experiments. A revolution that had quietly taken place in the technical and financial status of the electrical industry had to be faced if the national, state and local government were to be more than adjuncts to private capital.

Long distance, high tension transmission had given birth to the superpower age. Scores of large and small municipalities and great industries could be served by a network of "high lines" with power generated at a few giant stations. Small stations for each town were out. Improved methods of burning coal or oil or gas were greatly reducing costs.

Pyramiding of holding companies had followed, and there was a wild scramble to buy up the smaller operating concerns. Vast amounts of inflated securities were sold in the hope and expectation of maintaining existing high retail electric rates. The electrical industry went into politics and propaganda with a vengeance to achieve these ends.

The Administration Is Helpful. In May 1924 Secretary of Commerce Herbert Hoover, as chairman of the Northeastern Super-Power Committee, reported a plan to "interconnect" all private companies operating in the northeastern states and to develop unused hydro sites, including the St. Lawrence, for their use.¹ Public ownership was not mentioned. However, he said the scheme would save \$250 million annually to the companies. When I telephoned Paul Clapp, the Secretary's power aide, to ask about savings to retail consumers the reply was that it had not been considered.

The *Electrical World* in May 1927 described the operation of the Ohio Public Service Company serving 191 communities with a population of 440,000, a unit of Henry L. Doherty's City Service empire. The caption read: "What Consolidation Brings About. Seven Properties Consolidated in 1921 Have Increased Net Earnings 191 Percent—Investment 124 Percent—Production Costs Halved." But there had been no such startling reduction in consumer rates.

General Jadwin's Plan. During 1927 two devastating floods—acts of God, in legal lore—occurred, shocking the nation and directing attention to the necessity of reservoir dams to supplement levees in control-

ling such catastrophes. Excessive rainfall on nearly every important tributary watershed of the Mississippi system produced minor floods. The rains continued and for six weeks in April and May culminated in the most gigantic flood on the Mississippi since 1844. The damage extended from Cape Girardeau in southeast Missouri to the Gulf. Secretary Hoover, who personally directed relief, characterized it as "the greatest peace-time catastrophe in the history of the nation." To note only one illustration of the havoc, the Red Cross installed 80 concentration camps to care for some 700,000 persons driven from their homes. The camps extended a thousand miles to the Gulf from Cairo, Illinois. More than 200 lives were lost.

On November 3 the greatest flood catastrophe in the history of New England ravaged Vermont, New Hampshire, Massachusetts, and Connecticut. The known loss of life was 112. Some 900 bridges were washed out. The property loss to agriculture, industry, utilities, and city dwellers was around \$111 million, including actual damage to structures.

Federal, state, and municipal governments and private organizations contributed millions of dollars to aid the sufferers and repair damages. Aroused citizens demanded action from the federal government to safeguard the public against future calamities. Coolidge responded by appointing a commission controlled by the Corps of Army Engineers, of which Major General Edgar Jadwin, chief of the corps, was chairman. The Jadwin Plan was developed, submitted to Congress by the President, passed and finally approved on May 15, 1928. An official summary of the plan says: "The Army Engineers [Jadwin] plan for flood control of the Mississippi River contemplates at this time flood control of the waters of the Mississippi in the 'Alluvial Valley' only. Outside the Alluvial Valley control of flood waters is not so important and can wait future developments. The Alluvial Valley is that portion of the Mississippi Valley below Cape Girardeau, Missouri."

Below Cape Girardeau, a town 100 miles south of St. Louis, levees on the main stream to the Gulf were to be raised three feet. Spillways were to be constructed to drain off the crests of superfloods into swamp areas along the lower river. A spillway channel five miles long and 2 miles wide would drain off dangerous crests into Lake Ponchartrain and thus protect the city of New Orleans. The estimated cost was \$325 million. The construction of headwater reservoirs on the Missouri, Ohio, and other watersheds was dismissed as too costly. Such remedies as reforestation were dismissed as having little value.

This flouting by the Army Engineers of modern conservation methods

advanced for a quarter century aroused much indignation. In a speech on the floor on March 9, 1928, during the debate on the Muscle Shoals bill, Senator Henry B. Hawes, Democrat of Missouri, denounced the Jadwin plan and pointed out that it had been rejected by a conference at Chicago called to consider the emergency and also by 95 percent of the civilian experts who testified before the House and Senate committees considering it. Jadwin's triumph was due to the political influence of the utilities and dredging and levee contractors who feared that public power might be developed at retention dams.²

Is There a Power Trust? In answer to the charge that public ownership or even regulation of utilities was "socialism," liberals warned against the dangers of the power trust. Articulate utility spokesmen heatedly denied the existence of such a trust. Both terms, used as epithets, were characteristic exaggerations. If Muscle Shoals was Socialism so was the Post Office and the Panama Canal. The electric industry was neither owned nor controlled by a single group as the term Power Trust implied. The only sense in which it was at all justified was that 90 percent of the industry was united in an organization for political and propaganda purposes. The real issue was whether rapid consolidation of ownership and control was creating monopolies in violation of the Sherman Anti-Trust Act and becoming a menace to free enterprise and the public welfare.

In February 1925 the Senate passed a resolution by Norris directing the Federal Trade Commission, headed by William E. Humphrey, Republican and ex-Congressman from Washington, to investigate to what extent monopoly existed in the electrical industry. General Electric in particular was to be studied because of its control of the Electric Bond and Share Company. Efforts being made by the utilities to control public opinion on the question of public ownership were also specifically designated for study.

Two years later in February 1927 a report was submitted which showed the percentage of the national output of electric energy generated and sold by each great holding company. The report indicated no national monopoly. But there was no comment on regional monopolies. It developed that the Federal Trade Commission had merely mailed questionnaires to the companies and tabulated the answers. This was tantamount to accepting as valid what the utilities had to say about themselves. They were commended in the report for their "praiseworthy cooperation." Comment on mergers was limited to the statement that a large number of independent companies had "become affiliated with larger power groups" during the inquiry which made

the work difficult and, significantly, "no attempt was made to determine whether the book value of investment conformed to the sale value thereof." The rate of profit "averaged nearly 8 percent," of course, including watered stock. No investigation of propaganda, as ordered, was made. It was explained that the Attorney General had ruled that provisions of the appropriation bills forbade expenditure of money for that purpose. Progressives at once denounced the report as a whitewash.⁸

Senator Walsh Drops a Bombshell. Six days after this innocuous report had been received, Senator Thomas J. Walsh, Democrat of Montana, delivered a major floor speech on February 28, 1927, demanding an investigation by a five-man Senate Committee into the practices of public utility holding companies. Ignoring the Trade Commission report and also the public ownership issue, Walsh declared that the Sherman Anti-Trust Act had never been properly enforced by any administration and that it was being flouted by the power companies. For proof he had placed on the desks of the Senators his own study showing 1,500 "mergers" in 1925 and 1926 alone. The list took up 11 pages of fine type in the *Congressional Record*. Was not this monopoly? And a threat and a menace to a competitive economy? Not only the utilities but the financial world was alarmed and the proposed Walsh investigation received as much attention in the press and elsewhere as Muscle Shoals itself. Walsh was feared. If his resolution for an investigation passed, he would become chairman of the committee. He had conducted the Senate probe into the notorious Teapot Dome scandal, which had forced the resignation of Edwin Denby, Secretary of the Navy, and later sent Secretary of the Interior Albert B. Fall to prison. This accomplishment, in addition to his reputation as an able constitutional lawyer, had given Walsh a national reputation for integrity and fearlessness.

Against Government Operation. With their reputation and political control at stake, the utilities acted with vigor. The National Electric Light Association in June 1927 set up a joint committee of national utilities associations, representing the trade organizations of the electric, gas, and street railway industries. George B. Cortelyou, Secretary of the Treasury under Theodore Roosevelt, and then president of the Consolidated Gas Company of New York, was named chairman. Offices were set up in Washington and New York and \$400,000 voted to finance operations. Cortelyou announced that there would be no lobbying. The committee's sole purpose was to tell Congress and the

public the truth about the utilities and refute misrepresentation by irresponsible radicals.

The National Electric Light Association, trade organization of companies generating 90 percent of the nation's power supply, continued its propaganda and political activities, supplemented by 12 regional Committees of Public Information, which also issued pamphlets and releases to newspapers representing the utility point of view. The Insults of Chicago were prominent in the association. The utilities had the influential backing of such organizations as the United States Chamber of Commerce, the National and the Investment Bankers Associations, the National Manufacturers Association, the American Farm Bureau Federation, the great insurance companies, and even the National Association of Railroad and Utilities Commissioners. The latter were state agencies set up to protect the public. In the Muscle Shoals region the Tennessee River Improvement Association was continuing its efforts to assure a private lease. The only voices urging public operation in that region were those of Allen J. Roulhac, ex-county judge and mayor of Sheffield, Alabama, and Dr. John R. Neal, who conducted a private college of law.

For Government Operation. A few national organizations favored the Norris position. The American Federation of Labor at its annual conventions of 1923 and 1925 unanimously adopted a Muscle Shoals resolution that opposed "any encouragement whatever to a privately owned and operated power system" and urged "the necessity for a coordinated public development and control of said water resource for the service of the people at cost, giving due regard to the four-fold duty of water for domestic supply, for irrigation, power production and flood water storage."

Others supporting Norris were the National Farmers Union, the National League of Women Voters, the Methodist Federation for Social Service and, more specifically devoted to the subject, the National Popular Government League of Washington. Senator Robert L. Owen was president of the League and this writer was executive director. Also backing Norris was the Public Ownership League of America located in Chicago. Former Congressman A. M. Todd was president and Carl D. Thompson was secretary. Both were long-time and ardent crusaders for public ownership.

The Press. A large majority of the daily and weekly newspapers of the nation were quite hostile to Norris. Most vigorous opposition were such leading dailies as the *Washington Post*, *Philadelphia Ledger*, *New York Times*, *New York Sun*, *Boston Herald*, *Chicago Tribune*,

Omaha World-Herald, *Portland Oregonian*, *New Orleans Times Picayune*, *Chattanooga Times*, and the *Los Angeles Times*. Supporting government operation were the 37 Hearst papers, the Scripps-Howard chain of 20 dailies, the *New York World*, *St. Louis Journal* and the *Madison*, (Wis.) *Capital Times*.

In the magazine field, the *Nation* and the *New Republic* were especially militant. By 1927 the farm press was divided, a majority of editors having abandoned the idea that cheap fertilizer from Muscle Shoals by the cyanamid process was commercially feasible.

Muscle Shoals had passed the status of a local postwar problem and become a test case involving public control of natural resources on which all America was taking sides. Hence, the intellectual and emotional atmosphere in which the 70th Congress operated differed greatly from previous years. The prophecies of the conservation leaders of 1908 regarding soil erosion, reforestation, flood control, and the necessity of integrated development were being tragically fulfilled. The electric utilities had led the forces opposed to conservation policies.

The necessity for government operation of Muscle Shoals had become apparent unless, as the editor of the *Philadelphia Public Ledger* advised in May 1928: "Uncle Sam should say goodbye to Muscle Shoals and get rid of a bad bargain" (that is, treat it as war scrappage). That, however, meant political suicide to too many. All these issues were being hotly debated throughout 1927, in conventions, in the press, and by men in the street, to a hitherto unprecedented degree.

The public was aware of the basic issues. The long delay in settling the Muscle Shoals question was denounced as a national scandal, and demand for action became more and more insistent. Congress took note.

CHAPTER XVII

CONGRESS TURNS TO PUBLIC OPERATION

According to an ancient proverb, the stone the builders reject may become the cornerstone of the building. This is what happened to the Norris compromise bill for government management of the Muscle Shoals undertaking.

The 1926 elections had been unkind to the party in power. The Republican majority of 10 in the Senate had been wiped out. There were now 47 Democrats, 47 Republicans and one Farmer-Laborite, Shipstead of Minnesota, a liberal. The Republican majority in the House had been reduced from 61 to 39. Congress proved less willing to take orders from above.

When the 70th Congress met on December 5, 1927, the House had received no offer for a private lease of Muscle Shoals as solicited at the close of the previous Congress. Chairman Morin's Military Affairs Committee set to work drafting a bill for public operation which would guarantee national defense and fertilizer.

Senator Norris reintroduced his compromise bill (now S. J. Res. 46) on December 15. The bill was reported favorably by the McNary committee on February 3 and after three weeks of intermittent but strenuous debate it was approved by a roll call vote of 48 to 25 and sent to the House.

The Morin bill (H.R.12448), also a compromise, was substituted for the text of the Norris bill and on March 30, 1928, after a short floor debate, the House passed it and sent the measure back to the Senate, which declined to accept the House version. A conference committee was appointed consisting of McNary, Norris, and Cotton Ed Smith for the Senate, and Morin, James, Reece, Quin and Wright for the House. Its first report was rejected, but a second report was adopted by both Houses on May 25, 1928. The Senate vote was 43 to 34, and the House vote 211 to 147. In the Senate 16 Republicans, 22 Democrats, and one Farmer-Laborite voted yea; and 22 Republicans and 12 Democrats voted nay. In the House 74 Republicans, 134 Democrats, 2 Farmer-Labor and one Socialist voted yea; and 123 Republicans and 24 Democrats voted nay. It can be seen that a total of 90 Republicans refused to follow the leadership of President Coolidge. While the measure would have passed the House without Republican support, it would

have been defeated in the Senate but for 16 Republicans who voted with Norris on final passage.¹

The Pocket Veto. The bill was laid on President Coolidge's desk the next day, May 25. He neither signed nor vetoed it but kept silent. The first session of this Congress adjourned on May 29. Ten days passed and no word from the White House. The bill had received a pocket veto.

A constitutional question at once arose over whether the 10 day limit allowed a President for vetoing a bill applied to a session as well as to the final adjournment and legal death of a Congress. If not, Senate Joint Resolution 46 was law despite the pocket veto. The U. S. Supreme Court just then had under consideration an identical question in the case of the Ontonagon Indians. The court finally ruled on May 27, 1929, that such a veto was valid. In the meantime the Muscle Shoals bill had been shelved. A whole year had elapsed with nothing done. The bill was dead.

The Provisions of the Vetoed Bill. Although vetoed, the bill reflected the progress of congressional agreement on solution of the Muscle Shoals problem. The measure that Congress approved had provided for ownership and operation of the entire project to be supervised by the Muscle Shoals Corporation of the United States for national defense, navigation and flood control, power and fertilizer production; the corporation to be governed by a board of three members, appointed by the President and confirmed by the Senate.

The hydro-power station at Wilson Dam and the two steam stations nearby were to be equipped with generating units to full capacity. Only one new dam was ordered built—at Cove Creek on the Clinch River, 375 miles upstream, to regulate river flow. The right was given to construct transmission lines "in any direction" at will when needed. The nitrate plants were to be rehabilitated and kept in perfect condition for instant use in the event of a war emergency.

The adopted policy on electric energy provided that it would be supplied at cost for defense or fertilizer purposes. Surplus power would be sold wholesale to private utilities, industrial corporations, or others, and to all public bodies and nonprofit electric farm cooperatives, which were given preference in case of a conflict with private concerns. Contracts were limited to 10 years. Wholesale rates for electricity would be fixed by the board. Retail rates would be regulated by the Federal Power Commission, not by state commissions. The power program was to be self-sustaining, and the net proceeds from power and other sales would be deposited in the United States Trea-

surey, as a special fund available to the board to finance fertilizer and other activities. Ten million dollars would be appropriated to launch the program without delay.

Comprehensive research and experiments were authorized for the "manufacture of fertilizer or any of the ingredients of fertilizers." The board was to modernize the nitrate plants and manufacture fixed nitrogen ready for application to the soil.²

The Case For the Norris-Morin Bill. To summarize, there were four principal arguments that caused Congress to abandon its former attitude: the economy and wisdom of retaining the project for instant defense purposes; the value of the power to ultimate consumers; the prospect of better and cheaper fertilizer; and the failure to induce private capital to make a fair, acceptable offer for a project on which \$130 million had been spent.

It was fertilizer and the devious tactics of bidders which had most influenced House members. Representatives James and LaGuardia voiced resentment at attempts to "fool" the House and at "the arrogance and brazen attitude of the lobby." Such remarks brought applause.

On the Senate side, since Norris had been compelled to abandon his plan to harness the whole river basin for all purposes, his chief interest in the compromise lay in the prospect of supplying homes, farms, and factories in the entire valley with low-cost power. He felt that electric rates over the nation were unreasonably high. This persistent hammering had brought a rebuttal from an unusual source.

Utility Lawyers Present "the Facts." When the Walsh resolution for a Senate investigation of utilities was pending in January 1928 a 282-page booklet was presented in opposition. Styled a memorandum, it purported to give facts about the utilities. It was signed by 173 utility law firms in 37 states. Represented were 262 attorneys, 141 of whom were or had held political offices from governor and United States senator on down. The document charged Senator Walsh with misrepresenting their clients, the electric and gas industries. It contended that the companies (including holding companies) were efficiently regulated as to securities and rates by the states; that consumers were getting the benefits of lowered production costs; and that electric consumers in Ontario were no better off than those in the United States.

The volume contained a full-page chart showing that in 32 selected cities in the United States with a total population of 25 million the average cost of residential electric service had dropped from an average of 9.2 cents per kilowatt hour in 1910 to 7.4 cents in 1926.

Norris Also Exhibits a Chart. During his speech on March 9, 1928,

Norris hung on the Senate wall a large reproduction of the lawyers' chart, prepared by this writer. There was an added parallel line in red which showed that since the public hydro-electric power system of Ontario began operation in 1910 the average cost of residential service in 21 Ontario cities and towns with a population of 1,179,000, had dropped from 9.3 cents to 1.6 cents per kilowatt hour in 1926. Added to the chart was a table which illustrated that if 10 percent were added to Ontario rates for taxes, another 10 percent for profit, and another 30 percent to pay for coal, the domestic rate would still be only 2.4 cents per kilowatt hour compared to the 7.4 cent rate in the United States. This left 5 cents per kilowatt hour of the United States rate unexplained, as the chart pointed out.

The effect on the Senate was unusual. Cotton Ed Smith interrupted Norris to remark, "I do not think there has been any more illuminating statement on the question of power than the one the Senator is now making for the benefit not only of Senators but of the country at large." At the suggestion of Blaine of Wisconsin the rule against printing charts of this character was suspended and the chart with accompanying data appeared in the *Congressional Record* of March 9, 1928.³ It was reproduced in many liberal newspapers and magazines.

As a rejoinder, Thomas W. Martin, president of the Alabama Power Company, issued a statement that was inserted in the *Record* by Heflin, to prove his company was selling power more cheaply than several large municipal systems. A table showed that in 1926 his company sold its output of just over one billion kilowatt hours at an average rate of 1.24 cents per kilowatt hour. As against this, the total output of the municipally owned plants of Seattle, Cleveland, Los Angeles, Jamestown (New York), Springfield (Illinois), Jacksonville (Florida), and Tacoma (Washington), had been just over one billion kilowatt hours but sold at an average rate of 2.18 cents per kilowatt hour. This startling announcement lost its impressiveness when it was disclosed that Martin's statistician had included vast quantities of power sold for a few mills wholesale while the municipal rates were all retail. Martin was charging his domestic consumers 8.5 cents per kilowatt hour while the municipalities were charging an average of less than 4 cents.⁴ From jousts of this kind Washington and the nation learned the value of Muscle Shoals.

The Case Against the Norris-Morin Bill. For the first time in the long fight over the Shoals projects, foes of the Norris-Morin measure had no substitute solution. So they resorted to repeating cries of socialism—or worse. Representative Charles A. Eaton, Republican

of New Jersey, whose biographical sketch in the *Congressional Directory* stated that he was a former Baptist minister and a Mayflower descendant, began a speech with the following:

"Mr. Chairman, I can not understand how our Military Affairs Committee, composed as it is of able, conscientious, and experienced legislators, could be induced to bring before this House a bill dealing with a major matter of public interest, which is so hopelessly unsound and vicious from every American point of view. The only possible explanation seems to be that the committee, like the country and the Congress, is sick and tired of the interminable Muscle Shoals delirium which has afflicted our country for almost 10 years, and in desperation they have at last shut their eyes and jumped off into space, landing, without intention or desire on their part, in a bottomless morass of injustice and economic absurdity. Of all the wild and weird legislation introduced in the present session of Congress this Muscle Shoals bill caps the climax . . . I am not willing as a member of this House to sit silently by and see this industry [fertilizer] confiscated and destroyed by action of our Government . . . I believe the farmers of this country would be the first to protest against such legalized robbery and oppression . . . This bill puts the United States Government squarely into the power business and into the fertilizer business. Both proposals are contrary to the genius of our political and economic institutions and are fraught with serious menace to the prosperity and progress of our people."

After asserting that private utilities were adequately serving the South with power that "is among the cheapest and most efficient in the world," Mr. Eaton concluded: "If we must go outside America to find some solution for the Muscle Shoals problem, why go to Russia?"

Senator Black and Land Values. In their shortage of arguments, foes of the bill protested against the nation's footing bills from which a single region would benefit. The measure provided for distribution of power among the states within transmission distance from Muscle Shoals. It was evident that the plan would not only provide flood control on the Tennessee but would materially contribute to the control of floods on the Mississippi River. Senator Black of Alabama argued that if people outside the project get the benefits of flood control they could properly contribute to the cost of it. "But suppose it raises the price of lands bordering on the Mississippi River or in the Mississippi Valley," Black declared, "then we ought to have a legislative decree that the increased profits which come from the raising of the price of those lands

by flood control shall be equitably distributed among all the other States.”⁶ That principle of taxation is, of course, the one advanced by Henry George as the basis for all taxes. Representative Crosser, of Ohio, had voiced the general theory on the House floor, but Black applied it to multi-purpose projects.

It is manifestly unjust that landholders should, without turning a hand, profit from investments by the federal or state governments to promote the general welfare; or, indeed, from the investments and labor of the citizenry. That is an untapped, legitimate source of revenue with which the future must and doubtless will deal as soon as the American people come to understand the nature of fundamental democracy.

CHAPTER XVIII

POLITICS AND WATER POWER

The presidential campaign of 1928 was important in the evolution of a national water power policy because it helped spread public understanding of the engineering and fiscal techniques necessary to achieve its goals. The Republicans won easily with Secretary of Commerce Herbert Hoover, Iowa farm boy, mining engineer, and Quaker. The Democrats ran Governor Alfred E. Smith of New York, a small businessman, Roman Catholic, and sachem of Tammany Hall.

The dominant issues were the continuance of prosperity and enforcement of the federal prohibition amendment of 1919. Hoover was a conservative and a "dry"; Smith was a liberal and a "wet." The nation was not ready to give up its attempt to control "bootleg" liquor, much less to repeal the prohibition amendment, which Hoover called a "noble experiment." The wet and dry problem over-shadowed all others. Religious prejudice played a part. Smith was the first Catholic ever nominated for the highest office in this predominantly Protestant land. His opponents waged an underground campaign of religious bigotry such as had not been witnessed for a hundred years.

Notwithstanding all this, the Coolidge pocket veto of the Norris Muscle Shoals bill, the pending Boulder Dam bill, the proposed St. Lawrence seaway and the daily front-page publicity given the Federal Trade Commission investigation of the propaganda methods of the private utilities, made the public versus private power issue one that could not be disregarded.

A bulletin that I issued in the midst of the campaign summarized the conflict as it appeared to liberals: "We make progress in the power war. For the first time electric power becomes an open issue in a presidential campaign. It is not the chief issue in the public mind. It will be a powerful factor in determining the election, but the people will not know that. The majority are voting on prohibition and theology despite all denials. Meantime the power trust is busy with an eye on the main chance. This bulletin deals exclusively with power . . ."

Both Parties Sidestep. The Republican and Democratic parties held nominating conventions in June. Managers of each hoped to sidestep the power question. The keynote speakers, Senator Simeon D. Fess of Ohio for the Republicans, and Claude G. Bowers, New York journalist,

for the Democrats, ignored the subject. In their platforms both praised conservation and development of water power resources in general terms. Each claimed credit for the Federal Water Power Act of 1920 and, in effect, assured the voters that their equity was secure under that law.¹ But there was nothing on concrete issues such as public versus private construction and operation, the great multipurpose dams under consideration, or whether there should be "high" dams with power or "low" dams for navigation only. Senator Norris declared "the dominant parties" were "silent as the grave" on these germane questions, causing the liberal *New York World* to comment, "It is difficult to dispute the accuracy of this description." Editors generally began debating whether water power should command more attention.

Since the platforms were not specific, attention turned to the candidates. Would they take up the cudgels? What were their attitudes?

Candidate Hoover Is Evasive. The answers came in August when the candidates delivered acceptance speeches. Secretary Hoover at his home town of Palo Alto, California, was discursive and indefinite, leaving the wonderment undisputed. At Albany, Governor Smith was positive and definite. He favored perpetual public ownership of water power sites and public operation of the generating plants.

In his Palo Alto address Hoover gave considerable time to water resource development but confined himself to description and admonition, thus: "We must adjust reclamation and irrigation to our needs for more land. Where they lie together we must co-ordinate transportation with flood control, the development of hydroelectric power and of irrigation, else we shall as in the past commit errors that will take years and millions to remedy." But "government should not engage in business in competition with its citizens," and should avoid regulating business unless "public rights are violated." The Federal Trade Commission investigation of utilities then in progress, was not mentioned, but the speaker attempted indirectly to mitigate the rising tide of public displeasure by pointing out that "business is practical, but it is founded upon faith—faith among our people in the integrity of business men and faith that it will receive fair play from the government. It is the duty of government to maintain that faith."

Hoover did not mention Boulder Dam despite the special interest of California voters in that project and their intense desire to know their fellow Californian's position. Senator Johnson was stumping the state at the time in behalf of his bill for federal construction of the dam and denouncing false propaganda against it, which had been revealed by the Federal Trade Commission investigation. Such severe criticism

followed that Hoover decided to make clear his position on Boulder in a speech to be delivered at Los Angeles on August 17. Public interest heightened from coast to coast.

High or Low Dam at Boulder. As chairman of the commission that in 1922 had negotiated the interstate compact for the development of the Colorado River, Hoover had favored a low flood control dam to protect the Imperial Valley at a point some 100 miles below the Boulder Dam site. This would leave the high dam at Boulder open to private exploitation, to which a large majority of California voters were opposed. The Los Angeles speech devoted only four short paragraphs to the project and only one sentence to the question of the hour. Hoover said: "We want the greatest reservoir and the highest dam at Boulder Canyon that the engineers will recommend and I am hoping that the project will receive favorable action from the present Congress."

Again disappointment. A flood of editorials, left and right, from coast to coast followed, speculating on what Hoover meant. The candidate was in a politically troublesome position. His home state, as well as that of his rival and some others, was committed to public ownership of power. He was personally opposed to this policy, and so were the leaders of the financial, industrial, and commercial world supporting his candidacy. For nearly two months after his ambiguous Los Angeles pronouncement, Hoover said nothing of consequence publicly. Years later, F. E. Scattergood, chief engineer of the Los Angeles Bureau of Power and Light, told me how President Coolidge and candidate Hoover were warned that unless they promised to back the passage of the Swing-Johnson Boulder Dam bill, Hoover would lose his home state. The pledge was given and passed along. The Republicans won. The pledge was kept, and the bill was passed and signed by Coolidge on December 21, 1928.

Governor Smith Is Positive. With his opponent and his own party platform noncommittal on the power issue, Governor Smith boldly took the initiative. In his acceptance speech at Albany on August 22, 1928 he commended the Federal Trade Commission investigation: "No more dishonest and unpatriotic propaganda has ever been seen in this country than that disclosed." He pledged that if elected he would insist that title to all power sites remain in public possession and that public agencies construct and operate all dams and generating plants. His solution of the old issue of jurisdiction was clear: "Where they are owned by the federal government they should remain under federal control. Where they are owned by an individual state they should be

under the control of that state, or where they are owned by states jointly they should be under the control of those states."

He advocated that energy be sold wholesale at the switchboard to private companies for distribution to consumers. "Fair and reasonable rates and equal distribution of power" were to be secured by "contractual agreement with the distributing companies." He added: "As to Boulder Canyon, I am of the opinion that the best results would flow from setting up a Colorado River Authority, representative equally of all the states concerned. The development should be by the states through the agency of this Authority by treaty ratified by Congress." In the case of Muscle Shoals, Smith favored government ownership and control and development of "a method of operation which would reclaim for the government some fair revenue from the enormous expenditures already made for its development and which now is a complete waste."

Al Smith kept hammering away constantly on the issue, challenging Hoover to be specific and to come out in the open. At Denver on September 22 he devoted his entire speech to his power program. The speech received a great press including an unusual amount of editorial comment. Many Republican and Democratic papers, as well as the liberal and independent papers, were critical, and justly so. It was widely asserted that the governor had made power an important issue in the campaign and that the people were demanding a show-down from the Republican leaders. At that time "public ownership" was in the opinion of the business world and millions of voters tantamount to socialism. Smith's pronouncement was a compromise with states' righters and devotees of private operation, but at last it became respectable for Democrats and independents to favor government in the power business as a byproduct of multipurpose dams.

Secretary Hoover Responds. Hoover spoke October 6 at Elizabethton, the home of Representative B. Carroll Reece, in the eastern tip of Tennessee, which had voted Republican since the Civil War. The voters in this part of the Muscle Shoals territory were anxious to know exactly where he stood. But the Republican nominee again disappointed his audience by saying: "I do not favor any general extension of the federal government into the operation of business in competition with its citizens. It is not the system of Lincoln or Roosevelt. It is not the American system . . . There are local instances where government must enter the business field as a by-product of a great major purpose such as improvement in navigation, flood control,

scientific research or national defense, but that does not vitiate the general policy to which we should adhere."

At once orators and editors—even some Republicans—lambasted the candidate for evasiveness. When Hoover reached Knoxville two days later, he was interviewed by Edward J. Meeman, editor of the *Knoxville News Sentinel*. The *News Sentinel* was a member of the Scripps-Howard chain of daily papers, which was supporting the Norris Muscle Shoals bill, the Swing-Johnson Boulder Canyon bill, and accurately reporting the Federal Trade Commission investigation. Aware that the crucial question in the minds of his readers had not been answered, the alert Meeman asked the candidate specifically how his reference to the desirability of government ownership in certain instances applied to Muscle Shoals.

Mr. Hoover replied: "You may say that means Muscle Shoals." Here was a scoop of nationwide significance. The wires crackled. Front-page headlines informed the country that the Republican candidate favored government development at Muscle Shoals. But anticlimax soon followed. On reaching New York City, Hoover evidently discovered that his campaign managers thought he had gone too far. When a clarifying statement was issued, it said in part that there was no question of government since "the government already owns both the power and nitrate plants." The Republicans had dedicated the Shoals to agriculture and national defense. The "by-products of surplus power should be disposed of on such terms and conditions as to safeguard all public interest. I entirely agree with these proposals."

Reporters looked at each other and asked: "What does it mean?" They left it to their editors to decide, according to veteran independent Thomas L. Stokes.²

Confusion followed. The jubilant Scripps-Howard papers, which were supporting Hoover for other reasons, editorialized: "We are glad that both presidential candidates are determined that the government shall retain Muscle Shoals. For this will give the people at least one check and balance against unjust rates and prices of predatory interests." Tennessee Valley people were elated. Muscle Shoals would be put to work. The consumers of the region would benefit. The conservative press held this to be no commitment since the candidate was opposed to government in business. General bewilderment was voiced by the independent *Baltimore Sun*, which asked, "What does one know from Mr. Hoover's statement about his real purpose with respect to Muscle Shoals, in the event of his election? Precisely nothing."

A Nonpartisan Analysis. For some weeks I had been studying the public utterances and official acts of the candidates. On October 11 the National Popular Government League published a bulletin titled "THE POWER WAR AND THE PRESIDENTIAL CANDIDATES." Carefully documented, the bulletin showed the opposing candidates' attitudes on 20 phases of the power problem.

Smith's position on the sale of public power disturbed me. Hoover's position was clear. In an address before the Columbia Basin League at Seattle on August 25, 1926, Hoover had said: "Where there is a byproduct of dams for other major public purposes such as navigation, etc., then the federal government should lease the power rights so as to recover as much of the whole of its total investment as can be." That pronouncement still stood unchanged.

With Smith it was different. Since 1919 he had campaigned for "public ownership of power." It had been assumed he meant all the way from the water wheel to the house, office, store and factory. He had cited Ontario Hydro as an example and advertised the fact that Ontario consumers were buying current at one-half the rates charged in New York. In a special message to his legislature in 1923 he demanded the immediate development of the Niagara and the St. Lawrence with the state itself owning and operating the power plants and transmission lines and selling the power direct to municipalities. This was the Ontario practice that Norris and Johnson were fighting for at Muscle Shoals and Boulder Dam.

Three years later, in 1926, Al Smith proposed for the third time the creation of a state power authority to develop the water power of the entire state. But he was vague in his statements regarding regulation and distribution. On March 15, 1926, he told a *New York Times* reporter: "When we speak about furnishing cheaper light, heat and power, we mean we will furnish it cheaper to the distributing company than such company is now able to buy it from privately owned and privately operated generating plants . . . the state will own the energy and must find someone to distribute it from this point, it can therefore have something to say about the price at which the private corporation, owning the distributing system, may finally deliver it for consumption."

This change in his policy was reflected in his acceptance speech when he stated he would fix retail rates in the contracts with private distributors. Having no confidence in the contract proposal, I addressed a letter to the governor inquiring whether he would include a provision in the law giving the government or a state the right to construct transmission lines to market the power in the event the

private companies refused to guarantee satisfactory low rates. To be fair and make certain Hoover had not changed his opinion, I addressed a similar letter to him. From Hoover's secretary came a letter saying, "with kind regards," that it was impossible for the candidate to answer many such questions, and, "I hope you will forego insisting upon a departure from the rule." No reply came from Smith so I wrote my question on a slip of paper, mailed it to an influential friend in Smith's headquarters, Raymond V. Ingersoll, who believed as I did, and asked that it be shown the governor. Pronto, as I was about to go to press, the answer came back that Smith would say no more on this subject in the campaign. It was clear then that both candidates were sidestepping this phase of the controversy.

Another question then agitating the public mind was the comparative merits of regulation and public ownership. Smith had expressed no confidence in regulation by state commissions but had said little or nothing about federal regulation. Hoover was different. His position was clearly defined in the title of his address on October 14, 1925, before the National Association of Railroad and Public Utilities Commissioners. It read: "Why the public interest requires state rather than federal regulation of electric public utilities." He asserted that state regulation "has been effective" and that there was "public danger in further federal centralization."

At that time the states had no control over the securities and rates of operating companies owned or controlled outside their boundaries by gigantic holding companies. The holding companies operated in interstate commerce and were then issuing billions of dollars of so-called "blue sky" stock unsupported by tangible assets. There was no federal law to protect investors so the field was clear for "write-ups," especially of common stock. In 1928 the situation was menacing. Because of the lack of public control many thousands of investors lost uncounted millions of dollars in the stock market crash a year later.

Under the Act of 1920 the Federal Power Commission did have power to regulate securities and rates of companies operating water power plants under lease if there was no state regulation. Hence, the appointment of the Secretaries of War, Interior, and Agriculture, then automatically constituting the commission, was of great importance. Would they or would they not enforce the law?

The evidence showed that Hoover had been the chief speaker at three annual conventions of the National Electric Light Association and that these addresses as well as his political speech in 1924 attacking the public ownership position of Senator LaFollette, candidate for

the presidency on the Progressive ticket, had been printed and widely circulated by the utilities. Smith had no such record. Hoover had ignored the findings of the Federal Trade Commission investigation; Smith had quoted from them at great length.

Following Patrick Henry's practice of judging the future by the past, I predicted that if Mr. Hoover were elected President he would (1) quietly or openly oppose, or veto if necessary, public ownership of a generating plant or the public distribution of power anywhere; (2) favor the side of the private power companies in the event of a compromise bill; (3) appoint cabinet officers who would speed up the leasing process; and, (4) be constantly quoted and used as a major authority in power trust propaganda while remaining silent on the methods of the power interests in influencing the press, the platform, the universities, and the public schools.

Governor Smith if elected would (1) actively and openly aid in the enactment of bills for public ownership and generation of power to be leased for distribution to private companies on short terms with rates to ultimate consumers fixed in the contract; (2) favor the side of the people on any compromise bill; (3) appoint cabinet members who would not speed up the leasing process and would enforce the Federal Water Power Act, including the clause giving first right to publicly generated power to public agencies; (4) would be quoted as favoring public power and would oppose the propaganda methods of the utilities.

During the next four years these forecasts were to be fulfilled with an accuracy that surprised even myself.

The presidential contest closed as Hoover devoted a Madison Square Garden speech to warning the nation against socialism. Smith's reply at Boston stated that the conservation measures being urged were no more socialistic than any other governmental activities—many of which had at their inception been similarly denounced as radical or socialistic.

The G.O.P. Wins. The Republicans won by a landslide, carrying 40 of the 48 states for Hoover and gaining control of both Houses of Congress by large majorities. In the area where the power question was a vital issue results were surprising. In the Muscle Shoals region Hoover carried the normally Democratic states of Tennessee and North Carolina and made big gains in Alabama. Obviously, the Elizabethton speech, which the voters understood as an endorsement of government operation of Muscle Shoals, had helped him.

The Aftermath. The Republicans held their victory to be a "mandate" against government in business—especially the electric power

business. Progressives were dismayed and discouraged. Senator Norris was downcast. Although he was a "dry" and disagreed with Smith on the distribution of power he had astonished his prohibition friends by actively supporting the governor in the campaign because of his conviction that disposition of the country's water resources was of paramount importance. In frequent conversations he told me the power trust had achieved its greatest political victory, almost inconceivable to him in the face of the revelations of the Federal Trade Commission investigation. He predicted that unless the Supreme Court held the Coolidge pocket veto invalid and his Muscle Shoals bill, passed in June, was in fact law, the property could not be saved for the people.

Other liberals were not so gloomy. They pointed out that the Republican contingent in Congress had been and was still sharply divided on the power question. Senator William E. Borah of Idaho, outstanding liberal Republican who vigorously supported Hoover, stated that he disagreed with him on the power question and if power were the only issue in the campaign he would not have supported him.

President Coolidge Signs the Boulder Canyon Bill. The campaign pledge made to hold California's votes by passing the Swing-Johnson Boulder Canyon bill, pending for six years, was kept though with some unwanted amendments. The enactment came promptly at the beginning of the final session of the 70th Congress and was signed by Coolidge on December 21, 1928. The federal government, with the Reclamation Service as its agent, was authorized to build the dam and powerhouse. But government transmission lines were denied. The Secretary of the Interior was authorized to allocate power at the dam between public bodies and private companies.

CHAPTER XIX

HOOVER'S HONEYMOON DAYS

Election of Herbert Hoover brought a vast sense of relief and great expectations to many people. Millions of voters believed a dangerous Roman Catholic politician had been kept out of the White House and that a high-minded humanitarian engineer-statesman had been elected instead. They expected vigorous direction and action. Such promising leadership would redeem past party mistakes and merit public esteem. The economic system would be kept on a sound footing and prosperity assured, with a "chicken in every pot," for even the humblest toiler. The Prohibition Act would be enforced, and the morals of the masses improved. Natural resources would be developed and utility services rigidly regulated.

To be sure, Hoover did not favor public power, but that was a local problem. Along with Coolidge, he made an exception in the case of Boulder Dam, and gave the country to understand he would do the same in the Muscle Shoals case. It was generally anticipated that Congress would reenact the Norris Muscle Shoals bill and that Hoover would approve it. Thus, the old squabble would end. Hoover would faithfully administer the new Boulder Dam Act and municipalities of Southern California would receive preference in use of the hydroelectric power as provided by law. The Federal Water Power Act would be administered as intended, and no private company would be permitted to issue millions of watered stock on a lease for development of a publicly owned site.

All these pleasing prospects were shattered within weeks after the new president took command. On March 3, 1931, Hoover vetoed the Norris bill for government operation of Muscle Shoals. His veto message had a vehemence seldom paralleled. Significantly, a Republican House rejected the leadership of its President and passed the Norris bill over his veto by a majority of 73. The Senate came within six votes of reenacting the bill over the Hoover veto, although a two-thirds majority is required.

Public opinion turned against the power trust and created a national climate that made its political support a liability. After 30 years of warfare, the nation was ready for public operation of Muscle Shoals and multipurpose development of the Tennessee River watershed.

Part of the reason was to be found in events of the previous ten years and part in sensational happenings in Hoover's first two years in the White House.

The Stock Market Crash. The "Great Depression" of 1930-1936 started on October 29, 1929, with the worst stock market crash in American history, following the "Mad Decade" of frenzied speculation. It has been estimated that book values of stocks and securities of all kinds dropped \$40 billion in eight weeks. A sizable proportion were electric utility stocks. Tragic disillusionment followed. Through 1928, despite warnings that the business boom was due partially to over-capitalization of corporations and was dangerous, Coolidge and his millionaire Secretary of the Treasury Andrew W. Mellon, whose financial judgment was supposed to be infallible, had gone out of their way to advise the nation that all was well. Hoover had confirmed this comforting assurance when he took office and announced that an era of permanent prosperity for all had arrived.

Purchasers of industrial stocks in the boom period knew they were taking a chance but the holders of electric utility securities had a special reason for confidence. A constant barrage of propaganda by the industry had assured the public that electric securities were completely safe and sound because their issuance had been approved by powerful state public service commissions. Hundreds of thousands of investors, from rich bankers and businessmen to overalled workers and even "widows and orphans" were horrified to find these "customer owned" stocks suddenly worthless.

What was the cause of this catastrophic and totally unexpected debacle? Was it an "act of God" or one of human origin which might have been avoided? Fortunately, the Federal Trade Commission investigation of electric and gas corporations was in progress to show that the catastrophe was not an "act of God." Its disclosures of the utilities' financial and propaganda activities threw a flood of light on the whole economic system. Historians pronounced it the most important inquiry into the economic life of our republic up to that time. And, since our people were doing more sober thinking on the basic structure of our civilization than they had since 1776, this inquiry became Episode No. 1.

The FTC Investigation. Senator Thomas J. Walsh of Montana introduced his resolution for the investigation in February 1927, and it passed a year later, February 15, 1928. Open hearings began on March 8, when the presidential nominating campaigns were becoming intense, and lasted seven years.

Walsh was disturbed over the pyramiding of holding companies and the consequent inflation of securities and defiance of antitrust laws. He feared a financial panic. Norris was also alarmed over false utility propaganda and its cultural and political effects. Walsh and Norris joined forces, seeking a Senate investigation of the Teapot Dome variety headed by Walsh. Utility executives, fearing Walsh, assured the Senate they had nothing to hide but objected to an investigation by politicians; let it be by economic experts—the Federal Trade Commission, for example. When the investigation was ordered, everybody prepared for a whitewash similar to that of 1926. The investigation would have been a fiasco but for one thing, the accidental appointment of Robert E. Healy as general counsel. Healy was a real public servant, both intelligent and courageous, who held personal and professional integrity above party politics. A former member of the Vermont Supreme Court, Healy was a Department of Justice attorney who had been recommended by Attorney General John G. Sargent, another Vermonter, shortly before passage of the Walsh resolution and without reference to that inquiry.

I had prepared to fight and publicize data that I expected the Federal Trade Commission would ignore, but presently word came from its employees that this investigation was to be the real thing. One day Colonel William H. England of the commission came to my office to inquire if I knew anything about a handsomely printed pamphlet widely publicized and sent to all members of Congress. Its author was E. A. Stewart, professor of agricultural engineering at the University of Minnesota. By inference, the reader got the impression that the university had sponsored the pamphlet since the name of the publisher was not given. The pamphlet purported to prove that the farmers were being served electricity by private companies just as efficiently and cheaply as the Ontario publicly owned system served Canada's farmers.

I handed the colonel a jacket filled with data and was able to inform him that when I was on an investigation trip the previous summer a professor at the Michigan Agricultural College at Lansing gave me a copy of this pamphlet with the remark that "Stewart has made us a reliable report on Ontario hydro rurals." By "us" he meant members of the teaching staffs in the nation's agricultural colleges dealing with rural electrification, who considered Stewart a trustworthy authority. Their confidence was further enlisted by Stewart's statement in his preface that his data had been approved by Ontario engineers. I told Colonel England that the engineers angrily denied to me that they had

endorsed Stewart's findings and that his report was false and misleading; moreover they were outraged because they had been given to understand the study was for his university.

I told Colonel England I was certain Stewart had been employed and paid by the private utilities to do that job. One reason I gave was that the report had been mailed to Congress at a critical stage in the discussion of the Muscle Shoals bill. Its manifest purpose was to refute Senator Norris' claims that Ontario rural service cost less than that charged farmers in the United States. The refutation was to be accomplished by pitting against him a purportedly scholarly and scientific study of the subject. The investigation later proved the truth of my surmise. The Stewart case became an ugly example of how university men were used in utility propaganda.¹

Chief Counsel Robert E. Healy. The England interview occurred early in the investigation when a whitewash was anticipated. A few days later Chief Counsel Healy requested that I come to his office for a conference. I found him to be a tall man of dignified bearing with a keen eye and an impressive bass voice. I had been wondering if he would be able to resist the terrific pressure certain to be brought on him. At the conclusion of the talk I remarked, rather facetiously: "Judge, are you aware you are becoming a curiosity in Washington? My friends on the Hill and elsewhere are asking me how it happens that you, a conservative Republican from Coolidge's home state, are going to bat for the Walsh resolution. Would you like to know what I am telling them?" He showed no resentment at the brash question but smiled quizzically and said, "Indeed I would." To this I responded:

"Well, I tell then that in my opinion you have two afflictions. First, you have an old-fashioned New England conscience and, secondly, you have respect for the ethics of your profession. You are no advocate of public ownership but you seem possessed with the absurd idea, politically speaking, that you have been retained as an attorney by the Senate to defend the interests of the people of the United States and propose to do it."

The ex-judge seemed pleased. Rising to his full height and shaking his finger at me very earnestly, he said: "That's about it. But if these utility fellows are found guilty they will be condemned out of their own mouths and official records." I knew then that the probe was in competent hands and there would be no whitewash.

A Fair Investigation. The investigation was eminently fair. Hearings were presided over by Commissioner Edgar A. McCulloch, former chief justice of the Supreme Court of Arkansas. Judicial procedures

were observed. The utilities and their attorneys were given opportunity to refute any statements of fact, with the result that the findings were incontrovertible. The findings received press coverage and consequently had great influence on public opinion.

By 1930 Congress and the nation had learned how the electrical industry, through the National Electric Light Association, spent millions of dollars to influence the press, the educational system, and professional and civic organizations in their warfare against public ownership. Electricity consumers were not pleased to learn that they were paying for this propaganda as a part of utility operating expenses and that it did not come out of the pockets of the company owners.

The Apologia. Throughout the early hearings, utility spokesmen proclaimed that when they had their day in court their answer would satisfy the public. The answer came in January 1930 when Bernard F. Weadock, an \$80,000 a year attorney for the NELA, who had been in constant attendance at the hearings, made a statement to the Federal Trade Commission and gave out an extensive press release.

He denied none of the facts unearthed. He claimed the industry had been on the defensive and had been forced to "combat the misrepresentations and activities of an interlocking group of organizations and individuals opposed to private ownership of any industry." This he dubbed "an unholy alliance" whose aims were the same as those of the Socialist party.

The charge was both false and ridiculous. The National Popular Government League was one of the four groups named. The others were the League for Industrial Democracy, the Public Ownership League of America, and the Socialist party. All four were operating independently as always, and their combined expenditures would total only a small fraction of the sums expended by the power trust. In an open letter to George B. Cortelyou, chairman of the Joint Committee of Utility Associations, I pointed out the absurdity of the answer and since he had declared his organization was "going to give the facts about the utilities" I challenged his sincerity. There was no answer.

For two years the Federal Trade Commission hearings dealt with utility propaganda. The public, educators, and authors learned much that was new about the relationships of big business and government. The commission, however, was not authorized to look into power company lobbying and politics. However, in each of these fields, an incident, so sensational and revealing as to challenge national attention, occurred in the fateful year of 1930.

Chairman Huston. During the winter of 1929-30, when the Muscle

Shoals controversy was at white heat in Congress, a lobby investigation had been in progress by a special committee composed of such outstanding Senators as Borah, Walsh, Blaine, and Robinson. The caustic Caraway was chairman. During February 1935 commonplace Muscle Shoals lobbyists had been summoned to testify, but on March 12, Claudius H. Huston, New York businessman and chairman of the Republican National Committee by appointment at the instance of Hoover, was placed on the witness stand. Reporters thronged the hearing room.

Congress was well acquainted with the work of the Tennessee River Improvement Association, which was devoted to private development and had fought all the Norris Muscle Shoals bills for government operation. It was not well known that Huston, then a manufacturer living in Chattanooga, had been head of the organization. The astounded senators were told by the witness under oath that although he had been president of the association from 1915 to August 1929, he could supply no definite information as to how much money had been collected and spent during that period. He could only estimate that the association had "probably spent between \$400,000 and \$500,000." No books had been kept showing individual contributors and only check stubs for expenditures. Colonel Worthington handled the funds. The committee was never able to get stubs or canceled checks from either Worthington or Huston. It became obvious that the power companies had been heavy contributors. Queried as to how and for what purpose this vast sum had been spent, Huston's memory failed him on all critical points. He referred the committee to Worthington. Finally, Huston admitted that on March 7, 1929, three days after Hoover's inauguration, and only four months before Huston became Republican national chairman, he had solicited and received a check for \$22,000 from the Union Carbide Company, then a bidder for Muscle Shoals. The check was to be used by lobbyist Worthington in Washington. Overnight Huston became a political liability. Newspapers reported that Republican senators urged him to resign and pressured Hoover to force him to do so. After a round of denials, Huston resigned.

The Plot to Unseat Senator Norris. Ordinarily the unsavory tactics of political campaign managers are passed over by the American people as antics of imperfect men in this imperfect world. But occasionally some super-reprehensible trick, which boomerangs disastrously upon its perpetrators, is tried. Such an incident occurred when both national and state Republican committees attempted to

defeat Senator George W. Norris of Nebraska as the nominee of the Republican Party in the primaries and general election of 1930. As the campaign opened in the summer, the Senator's principal opponent appeared to be Nebraska State Senator W. B. Stebbins, a prominent Methodist churchman. Though it seemed that nothing unusual would occur, there came a surprise. At the last moment one George W. Norris of Broken Bow, a little prairie town in Nebraska, filed as a candidate for the Senate. No one outside Broken Bow had ever heard of the other George W. Norris, but inquiry soon disclosed that the unknown aspirant was a young grocery clerk, of meager education, dependent on his weekly wages and without any political experience whatever.

A clever plot was at once revealed. The name George W. Norris, without any descriptive words, would appear twice on the ballot. The voters would be unable to know whether they were voting for the Senator or for the grocery clerk. The election authorities would be forced to throw out all Norris ballots and the Senator would be defeated although he could run as an independent in the general election. The plot would have succeeded except that the grocer's application, sent by mail, was postmarked July 3, the very deadline for filing, and was not delivered until July 5, after the holiday. The secretary of state, a "regular" Republican, accepted the July 3 postmark and declared the entry legal. Attorney General C. A. Sorensen, an "insurgent," ruled it was not. The case went to the State Supreme Court, and on July 18 Chief Justice Goss decided the grocer's entry had arrived too late and that the Senator's name was the only Norris on the ballot.

The Nye Committee Investigates. On July 19, a Senate select committee on campaign expenditures headed by virile young Republican Gerald P. Nye of North Dakota arrived in Broken Bow only to find grocer Norris had vanished. United States marshals could not locate him. Moving to Lincoln, the committee heard state officials and campaign leaders solemnly swear they knew nothing about the fledgling aspirant. He had entered the race on his own initiative. Tracked down and put on the stand the young grocer swore all this was true. Chairman Nye was stumped. The affair took on the aspect of a detective mystery. Intense national interest was aroused before the "break" came. Walter W. Head, treasurer of the Republican State Committee, and chairman of the board of the Nebraska Power Company, had employed Victor Seymour, a Lincoln attorney, to conduct a statewide straw vote to ascertain the strongest candidate to defeat Norris. The result was discouraging.

Paul Y. Anderson, who was covering the investigation for the *St.*

Louis Post Dispatch, interviewed Seymour's secretary about the survey and incidentally discovered she had typed the newspaper release announcing the candidacy of grocer Norris. Nye promptly subpoenaed the young lady, who verified the story.

Consternation followed. Key witnesses changed their testimony to avoid prosecution for perjury. It was then disclosed that candidate Stebbins, operating through Seymour and a Broken Bow attorney, had paid the grocer a \$500 Liberty Bond and expenses. Nebraska voters responded with a big primary election victory for Senator Norris. In the general election the Republican state committee threw its support, to no avail, to the Democratic candidate, former Senator Gilbert M. Hitchcock, owner of the most powerful newspaper in the state, the *Omaha World*.

It was evident in both elections that large sums of money were being spent to defeat Senator Norris, some from outside the state. The Nye committee was curious to know who paid for hundreds of thousands of copies of a scurrilous pamphlet attacking Norris which had been printed in Washington, D. C. Sitting in Washington, the committee disclosed that the money came from Robert H. Lucas, director of the Republican National Committee. Lucas admitted he had spent \$4,237 on the pamphlet but claimed he had borrowed the money and paid for it out of his own pocket. J. R. Nutt, treasurer of the Republican National Committee, testified he had personally reimbursed Lucas. Both shamelessly declared to the effect that they were out to beat "a Democrat" and that Norris should be kicked out of the Republican party. Despite flagrant violations of law and decency, the only persons prosecuted were grocer Norris and Seymour who served short jail terms for perjury.

A Nonpartisan Broadside for Norris. In the 1930 campaign the Republican high command, national and state, was so deeply indebted to power interests they took joint action to eliminate Norris lest he succeed with his Muscle Shoals bill. Early in the campaign Senator Bronson Cutting of New Mexico asked me to drop in for a talk about the situation. He told me that Senator Norris was without campaign funds, had no personal organization and no newspaper support with one minor exception. With the well-financed machines of both old parties against him, his chances of winning were gloomy indeed. Norris needed help. I prepared a broadside, tabloid newspaper size, summarizing Norris' record and carrying endorsements from distinguished liberals in all parties. A circular letter carried an appeal for checks and endorsements of Norris' candidacy. I received far more endorse-

ments than could be used. Excerpts were used in the broadside, telling Nebraska voters that the Senator was needed to protect the national interest as well as their own. The endorsements came from economic and cultural fields as well as political. On the political side, strong support for Norris came not only from Hiram Johnson and young Bob LaFollette, who were on the outs with Hoover, but from Senators Borah and Howell, Gifford Pinchot, and from Democrats like Senators Walsh of Montana, Dill of Washington, Congressmen James of Michigan and Crosser of Ohio. William Allen White, the Republican Sage of Emporia, Kansas, wrote: "The election of Senator Norris is the most important matter before the Republicans of this country." Professor John Dewey, Columbia University's famous philosopher, added that "anything but a triumphant re-election of Norris would be a national calamity. I cannot believe that the power interests can deceive and mislead the voters of Nebraska." Noted cartoonists John M. Baer of *Labor* and Talburt of the Scripps-Howard chain contributed cartoons, and 28 correspondents from the Senate press gallery sent tributes for the four-page, tabloid flyer. We printed 200,000 copies and mailed 15,000 direct to Nebraska state and county officials, school superintendents and teachers, and a roster of professional organizations that included the state's lawyers, doctors, and dentists. The rest went to the one-room headquarters of the Senator's secretary, campaign manager, and son-in-law John P. Robertson at Lincoln. Contributions were sufficient to send Robertson \$1,200 surplus for other campaign expenses.

During preparation of the broadside my office was broken into, and all letters from the press gallery stolen. The police never located the thieves, but the press boys sent duplicates and wrote articles about the incident as one more illustration of the tactics and desperation of the opposition. The vote on November 5 stood Norris, 247,118 and Hitchcock, 172,795. Norris won by a majority of 74,323.

The Revolt of the Educators. A few weeks after the Federal Trade Commission investigation began, a veteran Washington correspondent, John Snure, hailed me on the capitol steps: "Keep your eye on this business of power trust propaganda in the public schools. The people won't stand for it. It is going to raise hell!" John Snure was prophetic. The inquiry revealed a highly financed campaign to mould the mind of youth through education from grade schools to university graduates, with attendant corruption of many teachers and abandonment of university ethics. The boldness and crudeness of the scheme proved its undoing. The storm of resentment generated had marked repercus-

sions in politics. It is of more than mere historic interest since the power interests suspended their mass attack on the American mind for only a few years and then returned to it.

An Invitation. In 1928 Dr. Peter H. Odegard, an alert young professor of government at Williams College (Massachusetts), wrote me that he was chairman of a roundtable discussion on the political scandals of that year, to be held in Chicago on December 29 at the annual convention of the American Political Science Association. Odegard wanted me to address the discussion group on power trust propaganda, especially in universities, as exposed by the Federal Trade Commission investigation.

I replied that I was too busy to stop and write a polite academic treatise suitable for such an occasion and that even if I had the time I would doubtless offend his group by exhibiting a half dozen pamphlets or books published by utilities in which prominent university professors were quoted as authorities for outright misstatements of fact or palpably misleading statements, with their academic connections carefully displayed. Also I would recount where they had appeared in courts as expert witnesses for power companies. Next, I would pull out official documents proving their statements were falsehoods. Moreover, I would display a copy of an exhibit from the Federal Trade Commission files showing how much the professors were paid by the utilities for consultant services unknown to the public. I concluded, of course, that he would not dare have a presentation of that kind.

Dr. Odegard replied that was exactly what he wanted done. Undecided, I consulted Senator Norris and he said: "You must! you must!! We cannot miss this opportunity to get the truth to university men." So I accepted and gave an offhand talk, just as I had forecast, using a brief case full of documents. About 200 university men, many standing along the walls, packed the room. I never had a more attentive audience. A week later Odegard wrote me:

"... The effort of the Power Trust to insinuate itself and its propaganda into American schools and colleges constitutes a challenge which educators cannot ignore. Anyone interested in the probity of the teaching profession cannot be indifferent to the appalling facts disclosed in your Chicago speech.

"So many requests have been made for copies of your address that I am writing you in the hope that it can be put in some printed form so as to be available to members of the American Political Science Association, the American Association of University Professors and like organizations. You will recall that a resolution embodying this

request was unanimously adopted at the round table meeting in Chicago In view of the importance of the subject and the great interest manifested in it you are under a peculiar obligation to see that this is given the widest possible publicity.

"If I can be of any assistance in making this possible please feel free to call on me. It is imperative that there be as little delay as possible."

The Challenge To Educators. Several professors helped raise a fund for the purpose and in April 1929 I published a 48-page bulletin entitled *The Challenge of the Power Investigation to American Educators*. Several thousand copies were mailed to professors in the engineering and social science departments of our leading universities and colleges. They met the challenge thus sponsored by the political scientists in creditable fashion. Proper relations with industry was one thing, but unauthorized use of university names for false propaganda by faculty members secretly in the pay of the utilities was quite another thing and could not be tolerated.

Specific Cases. Several examples of misuse of educators were cited in the roundtable talk. I held up and described a 36-page pamphlet, *Government Fails in Business—Federal, State, Local*, which had been circulated by the the Washington lobby, the Joint Committee of National Utilities Associations. One chapter, headed "Ontario Hydro-Power Myth," sought to explain why rates of the public power system of Ontario were one-half to two-thirds lower than private rates in the United States. One paragraph read: "Dr. A. E. Kennelly, professor of electrical engineering at Harvard University and the Massachusetts Institute of Technology, reports that the Ontario public treasury pays 50 percent of the cost of current sold to households and farms."

Next I exhibited the October 1928 issue of the official Bulletin of the Ontario Hydro-Commission, which reported that the total domestic revenue of the entire system for the three years 1925, 1926 and 1927 was \$22,264,000. Since power is sold "at cost," then according to Professor Kennelly's statement more than \$11,000,000 must have been taken from the provincial treasury to pay for it. The report, however, showed that the Hydro system had paid all expenses out of revenue without subsidy from the provincial government. The province had put \$2,735,013 during the previous six years into construction of rural distribution lines to aid agriculture, but this was in no way a subsidy to Hydro.

I then showed another exhibit from the Federal Trade Commission investigation which revealed that Professor Kennelly was a consultant to the National Electric Light Association. His fee was \$5,000. After

citing several circumstances, I described the fashion in which the University of Idaho was used for a specific purpose.

Enter the University of Idaho. On September 10, 1927, *The Electrical World* of New York carried an article captioned "Government Energy Dear: Farm Engineer and University Agricultural Department Head Doubts Economy of Service from Government Plant at Minidoka, Idaho." The text disclosed that Professor M. R. Lewis had made a survey and found when proper cost accounting was applied the actual cost was "15 cents per kilowatt hour delivered." In letters to me the professor had truthfully disclaimed the use of this figure but he declined to request the magazine to make a correction.

The *Boise* (Idaho) *Capital Times* on April 18, 1927, stated that the report "reveals Minidoka power really costs the settlers seven times company's juice." The Hofer publicity agency of Salem, Oregon, which specialized in fighting public ownership, had a similar statement in circulation. The Hofer agency was sending free material to small city daily and weekly newspapers throughout the United States—some 13,000 of them. It was subsidized by power companies to the extent of \$84,000 annually.² The purpose of the publicity was clear: The Boulder Dam and Muscle Shoals bills were still pending, and the fact that a government dam could give consumers low cost power must be discounted. Wanting to know how low and why, my wife and I spent a week in 1926 investigating the Minidoka project. I described it thus: "Here is an area of 190 square miles which in 1904 was a sage-brush desert. Today it has a population of 14,000—2,286 farms—7 towns—23 schools—33 churches—5 banks—and products valued at \$5,000,000 per year. A power plant at the irrigation dam built in 1910 on the Snake River pumps water for the land and also furnishes commercial electric service. Over 100 miles of transmission lines carry electric current from the 10,000 H.P. power station to the towns and also to some twenty mutual farm companies."

In the front yard of each farm home stood a 20-foot pole topped by an electric light giving a person standing on a high building in Burley, Idaho, the impression of a large city stretching in every direction. The town of Burley bought its wholesale current at an average of one cent per kilowatt hour, retailed the current at a top rate of eight cents and, after paying all costs, was putting a profit of \$10,000 a year into the city treasury to reduce taxes.

The Federal Trade Commission had investigated and found that the Idaho Power Company financed Professor Lewis' report. W. R. Putnam, vice president and general manager of that company, admitted

that in May 1925 there had been organized in the office of Dean E. J. Iddings, dean of the University of Idaho College of Agriculture, a group known as the Idaho Committee on the Relation of Electricity to Agriculture. The committee consisted of 17 educators, farm and utility leaders. Dean Iddings was made chairman; Prof. M. R. Lewis, head of the Engineering Department (a drainage, not an electrical engineer) was secretary; and Mr. Putnam treasurer. The purpose was to "aid the farmer." First came a survey of the extent and character of rural electrification in the state. Professor Lewis was engaged as chief researcher with Prof. Hobart Beresford as assistant. Three reports had been made, the second of which contained the misrepresentations regarding the Minidoka mutuals which had been so widely publicized. The entire expense over four years had been borne by Idaho and north-west power companies. Lewis had been paid \$785 for his services and Beresford \$1,850.^a

A National Movement. That was not all. Putnam testified that the Idaho committee had been instigated by Dr. E. A. White, director of the National Committee on the Relation of Electricity to Agriculture. The committee's offices were in Chicago. Other Federal Trade Commission reports revealed that the national committee had been promoted and principally financed by the National Electric Light Association in 1923, ostensibly to promote rural electrification by the industry. Its membership comprised a long list of educators, farm organization officials, and utility executives, with Dr. White as director. Dr. White in turn was connected with the American Farm Bureau Federation. Eighteen state committees had been created. The reason why Idaho received special attention became clear. Senator Norris and others were citing Minidoka's low rates from a Federal dam and so it had to be discredited.

A Hesitant Statistician. Similar examples cited in this talk involved the universities—of Cornell, Pennsylvania, Minnesota, and Iowa, and the Smithsonian Institution. The trustworthiness of the evidence was not to go unchallenged. I was unaware that the chief statistician of the National Electric Light Association was in the audience. He came forward when I was answering questions and asked to be heard.

I had exhibited a reprint of the chart that Senator Norris used on the Senate floor, showing that United States residential consumers served by private systems were paying over 5 cents per kilowatt hour more than consumers served by the public system in Ontario. Pointing to the chart politely, for he was a charming gentleman, the NELA statistician stated that the comparison was unfair and utterly mislead-

ing because Ontario was served by cheap Niagara Falls power while all but a few American cities were forced to use coal burning steam plants at a much higher cost. Questioning eyes were turned my way. I was "on the spot." It was common knowledge not only that water power was cheaper than steam but the nation had been repeatedly told by utility publications that Niagara was an exceptional water power site, far cheaper than any other such site in the country or the world.

The attack, of course, raised the question whether I was an untrustworthy zealot for public power. With all the grace I could command I calmly said, "It is a fair question. Now will the gentleman tell us the differential in generating costs between water power and coal burning steam plants?" Evidently taken by surprise, he hesitated and then replied, "I do not know."

"What!" I exclaimed, "Do you mean to tell us that the chief statistician of the National Electric Light Association—trade organization of the electrical industry—does not know such an elementary thing as the cost of production, by whatever means, of his product?" Again he answered "I do not," and abruptly left the scene.

After he had gone I asked the group not to judge him too harshly because the point at issue, like finance, was a trade secret. If he had revealed it he would have been severely censured, just as most educators dare not tell too much truth in their classroom work. Even the experts of the famous giant power survey in Pennsylvania in 1925 had great difficulty unearthing the same data but found the difference, while varying from one plant to another was only a few *mills*. It did not explain an overcharge to consumers of over five *cents*.

At the time this address was made the Federal Trade Commission probe had been in progress only ten months. There was also another investigation of a different character. A survey of public utility instruction in colleges and universities by a joint committee of utility men and college professors, financed by the NELA and headed by Professor C. O. Ruggles of Ohio State University, had been in progress since October 1927. Group conferences had been held in central cities. Some of the professors present at my meeting had been guests of the local utilities. Their expenses were paid. It was evident to me that this accounted for the large attendance and for the friendly attention I was receiving. The honor of a great profession was in danger. Many professors present were worried that teachers who revealed forbidden truths about utilities might be denied promotion or even face dismissal. They had arrived at the fighting stage and wanted more ammunition. I was pleased to comply. Knowing that the Federal Trade Commission

was about to release "exhibits" covering the information desired, I postponed publication of my "challenge" bulletin until the release of an especially important one on March 13, 1929. This document, No. 4167, contained extracts from the proceedings of the National Electric Light Association conventions for the previous eight years and included a special section covering educational activities. By adding citations from this and other exhibits and from sworn testimony at hearings, I was able to present as a table of contents to the 48-page pamphlet the following summary:

"Recent exhibits filed during March in the power investigation by the Federal Trade Commission give final proof that the utilities have deliberately planned to control in their own economic interest our entire educational system from the universities to the grade schools. It is the first attempt of its kind known to American history.

"The investigation has been judicially fair but effective, all evidence being obtained from the industry itself.

"The board plan is to capture (1) professors in the universities and colleges, (2) teachers in teachers colleges, high schools and grade schools, (3) textbooks used in all schools.

"The subjects of principal concern are economics, law, political science and government and all social sciences—engineering and business management are distinctly secondary.

"Control of the teaching force and textbooks especially in universities will, it is expected, insure 'straight economic thinking' and the possession of so-called 'correct information' and thus mold the mind not only of this generation but succeeding generations. Two results of great financial value to the utilities will follow:

"A. 'Judges of the various courts,' 'lawmakers in city councils, state legislatures and in Congress,' 'members of public utility commissions, tax commissions, or other administrative bodies, local, state and Federal,' prosecuting attorneys, engineers,—in short, all public officials—will be so trained as automatically to oppose genuine regulation, public ownership, honest valuation, equitable rates, etc.

"B. A public opinion will be created so that voters will elect officials who will approve such policies of government, local, state and national.

"The character of the alleged 'correct information' desired taught is already indicated by false and misleading statements of fact, as well as opinions on public policy, found in reports and expert testimony

of prominent university professors who are now discovered to have been in the pay of the private utilities.

"Through their organizations, the National Electric Light Association, the Joint Committee of National Utilities Associations, and the various State Committees of Public Utility Associations, the utilities have the money, the men, the machinery and the influence to accomplish their purpose unless stopped now. This constitutes a challenge to American educators who are the natural leaders in the struggle to maintain the integrity of our educational institutions.

"The 'Committee on Cooperation with Educational Institutions' is the special agency through which the NELA is working. The convention speech of Dean C. O. Ruggles and the confidential proceedings of the educational committee, meeting at Chicago just prior to his nationwide tour, together with other official data, disclose with startling concreteness the real import and technique of the whole plan previously outlined by Chairman Parker.

"Is not a quiet survey of the teaching and writing personnel inevitable, if not already in progress?"

Aftermath. The preceding summary epitomized the results of the investigation up to April 1930, and its overall accuracy was confirmed as the inquiry proceeded. But I was disappointed with the reaction to my bulletin and later complained to my friend Professor E. A. Ross concerning the few letters I had received from educators either approving or dissenting from the pamphlet. He rebuked me in fatherly fashion, assuring me that although "the boys" were not saying much the utilities could no longer get "within ten rods" of a vast majority of them. He himself was on a committee of the Association of University Professors investigating the Ruggles' survey, which very shortly quit "cooperating" with the utilities and disappeared.

Why Cooperation Ended. The origin of the Committee on Cooperation With Educational Institutions is set out in great detail in Exhibit No. 79 of the Federal Trade Commission which, with many other exhibits, indicates the importance attached by Judge Healy and the commission to this episode. It was the most brazen attempt ever made up to that time to corrupt educational institutions. The investigation was of the highest value in educating the educators as well as exposing utility tactics.

The National Electric Light Association set up the educational group in 1923 under the direction of its public relations section. Its official purpose was "to bring about a clearer understanding and better methods of education with reference to public utilities in the higher institu-

tions of learning." The first chairman was John C. Parker, chief engineer of the Brooklyn Edison Company. From 1915 to 1922 he had been a professor of electrical engineering at the University of Michigan and enjoyed and merited a national reputation in both academic and engineering circles. The chairman who launched the Ruggles survey of utility instruction in colleges and universities was Carl B. Jackson, general counsel of NELA. He had been chairman of the Railway and Utilities Commission of Wisconsin and president of the National Association of Railroad and Utilities Commissioners.

An Epochal Meeting. Jackson held a special meeting of the committee at the Drake Hotel in Chicago on October 27 and 28, 1927. Nineteen top electric utility officials and twelve university professors heard Jackson explain its purpose: "It is my belief that the work has gone as far as it could go until we had a survey of conditions of a broad nature to establish the program for future cooperation . . . and that such a survey could be done only by one having the confidence of educational institutions."

Jackson then introduced Dean Ruggles, who had spent two months preparing the program.

"Among other things" said the dean, "the proposed survey should attempt to determine the extent to which students in our higher educational institutions have the opportunity to take courses in economic and closely related lines, and courses in public utilities which will enable them to have some understanding of public utility problems

"The graduates of law schools will come in contact with the public utility field in some such capacities as the following:

"1. As lawmakers, in city councils, state legislatures and in Congress. The importance of this function is seen when it is realized that the majority of the membership of these bodies is made up of lawyers.

"2. As members of public utility commissions, tax commissions or other administrative bodies, local, State and Federal.

"3. As counsel for the utility companies and for the public or regulating authorities.

"4. As judges of the various courts before which are brought many utility problems.

"The engineers will be called upon to an increasing extent to serve in at least the first three capacities mentioned above. The knotty problems which the power and light industry confronts in the development of an efficient so-called superpower system throughout the country are not so much engineering in nature as they are economic, social and political. As employees of public utility companies engineers

should realize that poor power factor may be found in the field of public relations as well as in the field of engineering

"The graduates of liberal arts colleges and schools of business will constitute a very important part of the 'public' with which the utilities must constantly deal. Many of these will, of course, become teachers in the colleges and universities. It goes without saying that it is in the interest of the public and of the public utilities that such graduates may help to bring about fair and equitable regulation of the public service industries."

The survey was going to determine the exact status of public utility teaching, or lack of teaching, in all universities and colleges throughout the country. The program disclosed Professor Ruggles as an advocate of "fair and equitable regulation" as opposed to public ownership, as were nearly all the professors present—but not quite all. Two young professors were in disagreement. Horace M. Gray, of Illinois, wanted to strike from the program sections that implied students should be trained to favor the utilities' viewpoint. Professor Sharfman, of Michigan University, said bluntly, "We have not a clear idea of what we are after." General George H. Harries, of H. M. Byllsby and Company, gave answer: "Are we telling our right names? We of the utilities would expect to be the beneficiaries of this survey because there is so much false doctrine in the economics which affect us This is a missionary effort and nothing more."

E. S. Mansfield of the Boston Edison Electric Company wanted "the type of curricula to educate the men we want in our industry." Efforts to get specific were sidestepped by Jackson and Ruggles with the assurance that "the big problem is to get a perspective in the field of fundamental economics and the ability for straight thinking." Venerable Prof. Richard T. Ely, formerly a noted progressive at the University of Wisconsin, backed up the idea with the remark that "economics is the most fundamental subject which a lawyer ought to have." James C. Bonbright, of Columbia University, wanted to know what sound fundamental economics might be.

There is no record of response to the objections; indeed, the public minutes of the meeting reflect none of the discussion.

Ruggles Rebels. The outcome of this auspicious undertaking was humiliating to the utility leaders who promoted it—the demise of the Committee on Cooperation. The reasons were giving in the June 1, 1929 report of the survey prepared by Prof. Ruggles, the directors, and signed only by the educators. The report was published by the National Electric Light Association with the explanation that when the

Federal Trade Commission hearings began making charges against the power people for their educational activities the utility members of the committee withdrew from participation. The report stated that until the electrical industry had freed itself of the charges of "lack of good faith, of improper propaganda, and of practices subversive of the public welfare" it was untimely for educators to cooperate further and therefore membership "is automatically terminated." And membership was never revived. The professors, Ruggles especially, felt they had been trickled and embarrassed. Ruggles stated: "Upon the organization of the committee for the survey in October, 1927, the representatives of the industry assured the educational members that the utilities were willing to make available all information relative to the public aspect of the industry. But although no attention was paid to public ownership and regulation full information asked for was not forthcoming, especially about holding companies [which made] effective and fruitful cooperation out of the question."

Political Scientists Take Action. The American Political Science Association, at the time of the roundtable discussions, unanimously adopted a resolution by Charles A. Beard and A. R. Hatton, requesting the American Association of University Professors "to inquire into the foundation of such charges against universities and university professors" as had grown out of the Federal Trade Commission investigation and to recommend "standards of professional ethics."

The association's report of 1930, written by E. R. A. Seligman, prominent Columbia University economist, and signed by John Dewey of Columbia, and Edward Allsworth Ross of the University of Wisconsin, found that "there has been a close connection between public utilities and the academic professions." Referring to the survey, the professors found that "while the tone of the Ruggles speeches was perhaps a little too exuberant and while a still franker statement of the situation might seem to have been desirable, there does not seem to be much of a serious character to criticize in the way he conducted this investigation or in the activities of the cooperating instructors." Professor Seligman concluded: "The university professor must be like the judge. His reputation for impartiality must be equally unsullied. He cannot take pay from private interests and maintain the wholehearted confidence of the public. In the past there have been some sad instances of such loss of standing on the part of hitherto distinguished scholars." The report condemned secrecy and found that an educator "is not justified in accepting a retainer from private persons in any controversial case involving questions of public policy."

At its annual convention the following December, the American Association of University Professors discussed utility propaganda methods and the Seligman report and passed this resolution: "Resolved, That the American Association of University Professors adopt the following statement of principles: No university professor who receives a fee or other compensation from any person or association interested in public discussion or testimony respecting a particular question of public importance should take part in such discussion, or furnish such testimony, without making public the fact that he receives a compensation therefor and the name of the person or association paying him said compensation."

The Common Schools Also. Public furor over utility propaganda in the public schools from kindergarten to high school was even greater than the attempt to influence higher education. The National Education Association in annual convention excitedly discussed the subject, and Dr. Joy Elmer Morgan, editor of the association's journal, ran an article by Senator Norris in the December 1930 issue roundly denouncing the power trust for its subterranean tactics. This phase of the utility plans to control the American mind "from the cradle to the grave," as one utility official put it, ceased at the time along with most other utility propaganda activities because of the Federal Trade Commission exposures.

Fears of the Educators Are Confirmed. The final report (Part No. 71A) of the Federal Trade Commission on electric and gas utilities propaganda, 486 pages with thousands of exhibits from utility files and quotations from sworn testimony, supports the general conclusion: "The record establishes that, measured by quantity, extent, and cost, this was probably the greatest peace-time propaganda campaign ever conducted by private interests in this country." The report found that the electric companies were responsible for 75 percent of this effort, which "gave most consideration to contacting and exploiting" the press and the schools following methods first employed by the Insulls of Chicago. The report gave exact figures on the number and cost of the thousands of copies of pamphlets and books sent free to grade schools, universities, and libraries. It stated: "The utility program for educators and schools from kindergarten and universities was designed to mould the thoughts and beliefs of the present and future generations in conformity with the utility interests."

The cost of the educational campaign uncovered, including direct payments made to educational institutions and professors and for

books, pamphlets, and school contests, was a grand total of \$1,312,265, of which \$114,960 went to professors.

The stand of the educational leaders against subversion of the schools accounts for the shift of public opinion against the utilities during the first two years of the Hoover administration in a far greater degree than generally recognized. The press largely surrendered to the utilities; the educators did not, and the public had more confidence in them.

Hoover himself did nothing to help the public get facts about holding companies, regulation and public ownership of utilities. For 12 years as Secretary of Commerce and as President, he remained unchanged. Through the eight years of its investigation, the Federal Trade Commission received no accolade from him. He remained silent throughout all the disclosures and reports. As late as 1955, Hoover, as chairman of the Commission on Organization of the Executive Branch of the Government still held that the government has no right to engage in the power business and that the power function of the Tennessee Valley Authority and similar projects should be turned over to private concerns.

As of the Late 1950s. As of the summer of 1955 an unprecedented propaganda campaign was at high tide to reverse the nation's conservation policies to meet the insistent demands of so-called free enterprise—including the abandonment of TVA principles. Evidence multiplies that this drive embraces renewed pressure on our entire educational system. Assured that a comparison between the methods employed in the 1920 period and those of the 1950s is in place here, I have made considerable inquiry. The results are epitomized in letters from which I am permitted to quote—written, dramatically enough, by the two young educators who asked pointed questions at the Chicago Conference in 1927. Each of them has been drafted from time to time by federal or state governments for service that has brought them into direct contact with practical utility problems. They know the past as well as the present.

Dr. James C. Bonbright, professor of finance in Columbia University's graduate school of business, who served for several years as chairman of the board of the New York Power Authority, writes:

"Public utility propaganda today—I mean propaganda on behalf of the private utility industry—is much subtler and probably more effective than it was in the rougher days of the 1920s. Moreover, it is more effectively tied in with the support of capitalism in general. Consider, for example, the success of the public utility industry in identifying

private ownership with 'free enterprise.' Now I happen to be a strong supporter of private ownership of public utility companies, as well as a strong supporter of privately endowed universities and also of state universities. But the last thing that I would dare to claim for a private utility company is that it represents 'free enterprise'—if it did I should want to get rid of it."

Dr. Horace M. Gray, University of Illinois professor of economics, had this to say:

"The power trust is now [1955] engaged in a great national propaganda campaign to destroy public power and to capture atomic energy. But, like other big business interests, it has become sophisticated and pseudoscientific. It no longer seeks to 'control' education by the crude methods of the 1920s—such as dictating the content of the courses and textbooks, introducing special interest propaganda in the classroom, or intimidating teachers. Rather, it relies on the 'saturation' technique of propaganda, in which all media of mass communications are utilized to inculcate certain social attitudes and beliefs among the people generally. By employing the arts of deception gleaned from psychological research in human behavior, modern hucksterism seeks to condition public opinion to believe that big business is beneficent, efficient and progressive; that government is inherently corrupt, inefficient and tyrannical; that government intervention in economic affairs is a prelude to socialism; and that critics of big business are either doctrinaire theorists or cryptocommunists bent on destroying the American way of life. The power trust is a ringleader in this vast enterprise.

"The effects of this technique are deadly. It stultifies the rational faculties, paralyzes social action, breeds fear and insecurity, creates a feeling of abject dependency on private enterprise and extreme aversion to government, and induces a mood of blind, irrational defense of the status quo. Those who have faced college classes reared on this pap of hucksterism cannot have failed to detect the lamentable consequences. Their social attitudes are already fixed; they express themselves in the standardized, vacuous slogans of hucksterism; they are conditioned to respond according to a set pattern. Such students are ill-equipped to think for themselves or to reach valid independent conclusions on social questions. Even when confronted with facts, they are prone to deny the evidence and to seek refuge in the security of received dogmas. Their disposition is to avoid complex, controversial subjects requiring intensive intellectual effort and to devote themselves to technical vocational training for private employment. This is easier,

safer and more remunerative, but fatal in the long run for a free society . . .”

Whether the educators, the students, and the public of this generation will succumb or revolt as did their fathers and grandfathers, only the future will tell. What is needed is an investigation captained by a public servant of the caliber and integrity of Judge Healy and his loyal staff.

CHAPTER XX

FEDERAL POWER COMMISSION BATTLES

During the first two years of his administration several acts of President Hoover contributed to rejection of the Norris Muscle Shoals bill in the Congress.

Six factors in the situation for which Hoover was not responsible have been sketched. When the "Great Engineer" entered the White House, the Federal Power Commission had been operating for over nine years. It was under severe criticism for failure to honestly and efficiently administer the Federal Power Act of 1920. Hoover had frankly stated his opposition to public power but with equal force had insisted on "rigid regulation," to use his favorite phrase. Hence the public, and most conservationists of the Gifford Pinchot type who had labored for his election, expected a cleanup and speedy enforcement of the law. Others had doubts.

Hoover's appointments of cabinet members who ex officio constituted the Federal Power Commission were none too reassuring. Former Representative James W. Good of Iowa had been an outstanding opponent of government ownership. As Secretary of War, Good became chairman of the commission and the dominant member. The attitude of Dr. Ray Lyman Wilbur, Secretary of the Interior, a friend and neighbor of Hoover and former president of Leland Stanford University at Palo Alto, was unknown. The same could be said of Secretary of Agriculture Arthur M. Hyde, attorney and former governor of Missouri.

Chairman Good died in November 1929 and was succeeded by Patrick J. Hurley, an Oklahoma oil man. Ray Lyman Wilbur became acting chairman of the commission and faithfully executed White House policies.

In late June 1929 O. C. Merrill, electrical engineer formerly with the Forest Service, resigned. Merrill, who had been executive secretary from the beginning, was succeeded on July 1 by Frank E. Bonner, a field engineer of the Forest Service. On the same day Charles A. Russell, an experienced expert in utility valuation law with the Interstate Commerce Commission, became solicitor to serve with James F. Lawson, acting chief counsel, and William V. King, chief accountant, both of whom had also been with the commission from the beginning.

Through personal friendship and many interviews I knew them to be public-minded officials and firm believers in the policies of the act they were administering. With these changes the Hoover Administration was off to its fresh start.

Russell Gets His Orders. I learned from Russell that a few days before he took office the new executive secretary, Bonner, had directed him to have a conference with M. O. Leighton, Washington representative of the Electric Bond and Share Company of New York; that in a two-hour session Leighton, as Russell put it, "told me how to run our office," especially emphasizing that the "net investment" features of accounting provisions were not to be insisted upon. This revealing attempt at influence was, of course, known to few, but another incident within a month received nationwide publicity and proved most embarrassing to the administration and the electrical industry.

The Secret Memorandum. On July 30 Laurence Todd, a reporter for the Federated Press, got possession of a lengthy, unsigned, undated statement, titled, "The Federal Water Power Act and its Administration—A Summary with Suggestions—Confidential." The document made it clear that the entire electrical industry disapproved the way the Federal Power Commission's executive secretary, Merrill, insisted on enforcing the power act and since Merrill was about to resign, it was critically important to secure the appointment of someone friendly to the power companies. It was specified that the new secretary should be a man who would discharge William V. King as supervisor of the accounting staff and turn the accounting system over to men from the War, Interior, and Agriculture Departments because "it is believed that these departments will not have men specially trained for this work, at least they will be removed from the direct supervision of Mr. King."

Internal evidence indicated the source of the document and one reason why "regulation" by state and federal commissions was not meeting expectations: ". . . under Colonel I. C. Kelly, the first chief engineer of the Power Commission, now president of the Niagara Falls Power Company, and his assistant, Major Bennim, now with our own National Electric Light Association, a considerable number of licenses were granted. Recently, however, the conditions under which licenses have been issued have been more stringent and possession of federal water power has been hard to acquire."

The memorandum said that the aid of the Water Power Development Committee of the United States Chamber of Commerce had been enlisted to present these arguments [about King] "to the Secretaries

who form the commission." The concluding sentence read: "It is to be hoped that discreet representations can be made to the new Secretaries on the commission." This was an evident appeal to utility executives throughout the nation to bring pressure to bear. The authorship was never openly disclosed. Newspapers quickly picked up Todd's scoop on this alleged attempt of the power trust to direct the commission's actions. Denials followed, but, a Senate investigation seven months later disclosed that Bonner attempted to follow the policy outlined in the memorandum while he served as executive secretary during Hoover's regime as president. The President was known to be in constant touch with his former aide, Paul S. Clapp, now managing director of the National Electric Light Association.

For months newspapers reported conflicts in the commission, usually attributing them to personal clashes between Bonner on the one hand and Russell, King, and Lawson on the other. Knowing that vastly deeper issues were at stake, I published a National Popular Government League bulletin soon after Congress convened in December 1929, charging that if the present policies prevailed "the conservation movement, started in President Theodore Roosevelt's day, would be largely negated in respect of water power." The bulletin, which reflected common talk on the Hill, got a good press.

The Senate Investigates. Senator James Couzens of Michigan, chairman of the Interstate Commerce Committee, on June 8, 1929, introduced and secured the passage of Senate Resolution 80, ordering an investigation of federal regulation of power. A millionaire who made a fortune as a partner of Henry Ford before severing his connection and becoming mayor of Detroit, Couzens in his 14 years in the Senate as an independent Republican established a singular reputation for probity and force. Couzens' purpose was to prepare the way for an independent commission. Hearings were held in February of 1930 with Couzens as chairman. Others attending were Metcalf of Rhode Island, Brookhart of Iowa, Glenn of Illinois, Hastings of Delaware, Kean of New Jersey, and Pine of Oklahoma, all Republicans; and Democrats Wheeler of Montana, Dill of Washington, Pittman of Nevada and Wagner of New York.

Russell Testifies on Disharmony. The committee wanted to know whether the existing agency was a power trust commission and Bonner a hand-picked executive secretary to carry out its orders. Solicitor Russell was put on the stand first. He told the committee that trouble in the commission arose over chief accountant King's efforts to keep "blue sky" out of utility valuations on which rates are based. Russell

explained that companies built plants on navigable streams under preliminary permits but that final 50-year licenses were issued only after the Power Commission, on recommendation of the chief accountant, had approved the capital costs. Capital cost could include only legitimate "net investment" with no "writeups," "watered securities," or "fictitious values." It was illegal, the solicitor said, to issue a final license before this capital cost was determined and unwise to do so because electric consumers must pay dividends for half a century on the amount. It would also be the amount the government would pay the company if it decided to recapture the site.¹

Russell stated that many of the larger companies flouted the law; they included all sorts of fictitious and illegal items totaling millions of dollars. He cited an instance in which a Chicago company had included in its costs the building of some plants in Minnesota and Wisconsin and the thousands of dollars paid to a lobbyist from 1917 on to fight the Power Act before it was passed in 1920. He testified that accountant King by attempting to enforce the law had held up several important licenses; that Bonner wanted King to take "short cuts," which meant acceptance of the companies' claims and would lead to issuance of excessive securities and excessive electric rates. Russell testified: "He [Bonner] said it was my duty to tell Mr. King to lay off . . . In one conversation Bonner said to me, when he wanted to do something in a certain way . . . 'I think it is your duty as the solicitor, when I find unworkable provisions of this Water Power Act that cannot be complied with, to find me a way around it'." To drive his point home Russell cited the fact that the Niagara Falls Power Company had been refused a 50 year license because it claimed a \$77 million net investment including \$32 million "as the value of the water that the government gives them." Russell's interpretation of the law was strongly supported by Acting Chief Counsel James F. Lawson, who had been an attorney for the commission since its inception.

Billions at Stake. The intensely interested senators now wanted to know more about this "net investment" requirement. Big money was at stake and Chief Accountant William V. King was asked to furnish more exact information and explain the stalemate. King was a mild-mannered man, but a master of his profession who relished the opportunity to tell his story where it might count. The senators were astounded to learn that commission sessions lasted only about 30 minutes and averaged less than one a month.

The real responsibility fell on the executive secretary. The commission's own staff included fewer than 30 persons; all others were

borrowed at intervals from the War, Interior and Agriculture Departments. The chief accountant in 1928 accomplished his work with only two assistants. Since 1920 more than 1,000 applications for licenses had been filed, involving thousands of millions of dollars. King had been utterly unable, for lack of trained staff, to keep his work current. He testified that while the smaller valuation cases had been satisfactorily adjusted with no "water" included, six or eight large cases were not processed because the holding companies claimed millions of dollars in fictitious values and refused to permit him to examine their books and vouchers. The industry was advancing the absurd theory that the net investment should be determined at the end of the 50 year lease.

Instructions of the Commissioners. Executive Secretary Bonner, who was regarded as the administration spokesman, started his testimony in a positive vein:

"During the past few months there has been some discussion in certain sections of the press and elsewhere about the performance of the Federal Power Commission. Most of this discussion has been wholly irresponsible and free from the handicap of facts. Either from ignorance of the subject or deliberate design, certain individuals have labored by insidious methods to create the impression that the commission fails to safeguard adequately the public interest in the water-power sites under its jurisdiction. Anyone familiar with the work of the commission knows these attacks to be absolutely baseless and recognize in them the crafty political or self-seeking motives of the originators."

Bonner called the "importance and difficulties" of accounting work "exaggerated." He said Russell and King desired to build up "a powerful new agency." At this point Senator Wheeler asked whether Wilbur, Hurley, and Hyde would "approve the statements you are making here," and Bonner replied: "As nearly as I can interpret the instructions of the members of the commission this is in conformity with such instructions." The witness then all but shed a tear for the power companies, saying: "It would be unfortunate indeed if the public utility companies of the country through persecution are driven to abandon economical hydroelectric projects and employ steam generation exclusively."

For many months the electric utilities and their allies had decried the current investigation by the Trade Commission as "persecution," and to have a Government official in Bonner's position echo that propaganda was something new and significant. A long quiz followed

later by Senator Wagner and others as to just who was misleading the country by this alleged "irresponsible" publicity. The first offender named was the author of this book, whose vanity was thereby enhanced. Said Bonner: "I have in mind one case, an article by a man named King, Judson King, who is in charge of one of these propaganda agencies in Washington and I have forgotten the name of it, but it was widely published in some newspapers here in the East . . . that article was widely published." His memory failed him on other instances and at this point Chairman Couzens remarked, "I think the Senator from Montana [Mr. Wheeler] will agree that it is very well demonstrated where the sympathy of the witness lies." Bonner could not remember who recommended him for his job—a lapse of memory which was to prove unfortunate.

Merrill Answers. Former executive secretary O. C. Merrill was another star witness. He had directed the 1915-16 Senate investigation revealing rapid growth of monopoly in the electric industry. He was not an apostle of public ownership but favored private development under strict regulation. Senator Norris had praised his integrity and courage and relied on him for accurate information. Merrill flatly differed from Bonner on commission law and the reasons for disharmony. Accountant King was "an extremely reliable man." As to Russell, "They told me he was a stormy petrel, and I told them I would take a stormy petrel if he was competent."

Merrill was most emphatic when he testified that the Power Act could not be successfully administered in the public interest as enacted. He had repeatedly fought to have the act amended to enable the commission to employ and pay its own staff but had been turned down by the Budget Bureau under Coolidge and by Congress. Hence, Congress was partly responsible for the existing impasse and the slowdown in water power development.

The situation had become so intolerable and dangerous that on Merrill's recommendation the commission in February 1928 issued Order No. 27, "not to issue any other licenses until all questions with respect to accounting had been properly settled." But work and responsibilities were increasing. On February 28, 1929, only three months before Merrill resigned, the commission had approved a decision he had prepared affirming federal jurisdiction over rates and securities of licensees. Merrill emphasized that this formal decision had also been approved by "the law officers of three departments"—War, Interior, and Agriculture. The job could not be done by state commissions, he said, because all the big plants licensed by the com-

mission were controlled by holding companies that were transmitting power over state lines and were beyond the jurisdiction of the states. Bonner had contended that in nearly all the states in which federal power sites were located there were commissions which could protect the public interest. King had sworn this was not true and that only two or three states exercised any control whatever on rates and securities. To repeat and emphasize this prime controversial issue, Merrill said: "I contend that the commission has the authority to regulate rates of its own licensees engaged in interstate commerce." Chairman Couzens and the others agreed with him.

Secretary Wilbur Supports Bonner. Secretary Wilbur and Lieutenant Colonel M. C. Tyler, the commission's chief engineer, on loan from the War Department, supported Bonner on policies and the reason for "disharmony" in the staff. Little information of value was gained from questioning them. Finally, veteran James F. Lawson, whom I knew to be gravely disturbed by the commission's activities, reviewed its history and legal status. He stated: "I have not yet lost hope that the statemanship of Senator Newlands and of President Theodore Roosevelt, in urging coordination of river control, is not yet to be lost to the country."

"The whole set-up of the Commission is so incomprehensible that it is one of the rottenest exhibitions of government I have ever heard of," Senator Couzens exclaimed during the hearings. This outburst rang through Washington and was carried by the press to the nation. It epitomized public opinion, leading to the passage of Couzens' bill (S. 3619) on June 23, 1930, creating an independent five-man commission to take administration of the power act out of politics and enforce it properly. Congress adjourned on July 3 until December so that there was insufficient time to examine and confirm appointees to the new agency. Meantime, the Wilbur commission remained in control and during those five months some surprising events occurred which heightened the controversy over "government in the power business."

Eggs and Disharmony. Bonner's inability to remember who recommended him for his job would probably have been forgotten in official circles but for one of those personal incidents that intrigue the public. This one kept Washington and the country alternately laughing and indignant for two months.

On March 26, 1930, glaring press headlines informed the public that Mrs. Minnie L. Ward, chief file clerk at the Federal Power Commission, on returning from lunch the previous day with a dozen eggs purchased

for the family breakfast, found F. W. Griffiths, chief clerk, poking into her files. Angered—reporters called it a “brainstorm”—she threw six of the eggs at him, four of which landed, and then doused him with a pitcher of water. Here was “disharmony” in unexpected quarters. Everybody knew Mrs. Ward to be a calm, courteous, efficient lady. She had been in government service for 23 years and for 10 of the 23 years had presided over the files without friction.

Mrs. Ward was suspended. Her appeal to Chairman Wilbur for a hearing was refused. Two weeks passed and on April 8 her husband, Herbert S. Ward, an attorney, announced that he had filed a brief with Attorney General Mitchell, calling on him to take action on formal charges and facts disclosed therein; important records of the Federal Power Commission had been destroyed or removed to hide them from senatorial investigation. This was a penitentiary offense. He got no answer. The headlines blared “Egg Barrage Bares Power Intrigue.”

On April 14 Ward mailed a similar brief to President Hoover, adding that the actions of Griffith and Bonner were conspiracy, and Bonner’s testimony contempt of the Senate. There was only silence at the White House. In the meantime ace reporter Marion L. Ramsay, for Universal Service, interviewed Mrs. Ward. He quoted her as saying: “I hold no brief for throwing the eggs, except that I did it in a good cause—about 30 letters were removed with the answers.” Also, she said that Bonner had called for the files on June 29 and again in September.

On April 18 Norris sent the Senate into roars of laughter with a comment on the episode. Frazier of North Dakota had described the egg throwing incident. Norris interrupted to say that Mrs. Ward had used very bad judgment. Asked why, he responded, “I understand the eggs she threw were all good eggs.”

On May 1 Attorney General Mitchell sent Wilbur results of a six weeks’ investigation of the episode. A batch of letters had been found, but Wilbur, who had promised to press the matter and make the findings public, now declined to do so. Mrs. Ward appealed to the United States District attorney for aid to no avail. She was never granted a hearing.

It was widely reported that among other utility men, Bonner’s most influential sponsor had been Paul M. Downing, president of the Pacific Gas and Electric Company, a college friend of Secretary Wilbur. Finally, on July 2, the Senate unanimously approved Senator Wheeler’s resolution requesting the Attorney General to make available all testimony and documents in the case. The Attorney General declined.

Merriment over egg throwing was not good politics and a Congressional election was coming in November.

Minnie Ward had become a heroine for rendering a great public service. After the overwhelming defeat of Hoover and the reorganization of the Federal Power Commission, Mrs. Ward got her job back too.

Insull's Attempt to Censure Ambassador Sackett. Unfortunately for the administration there followed, right on the heels of the egg-throwing scandal, another incident, which *Labor*, a weekly newspaper for railway workers, declared worth "at least a million dollars of unfavorable advertising" to the power trust.

When the World Power Conference met in Berlin on June 16, 1930, Frederic M. Sackett, Hoover's ambassador to Germany by appointment, was invited to make an address. The ambassador, a Harvard man and lawyer, aged 62, had been president of the Louisville Lighting Company and of gas and coal companies. A former member of the United States Senate, he had been active in power matters and a supporter of "rigid regulation."

Samuel Insull, Chicago utility leader, was attending the power conference as an observer. When the press release concerning Sackett's address was issued, Insull visited the ambassador and induced him to cancel the engagement on the ground that his speech would not be well received. Not wanting to offend, Sackett complied and asked for the return of the advance copies. But the United Press man got the facts and reported the story.

An indignant conference, which included many delegates from public power systems throughout the world, insisted that the address be made. Insull agreed but insisted that the undesired passages be cut out. By this time Sackett's dander was up; he flatly refused and made the speech as written. The offending paragraphs were:

"I know of no other manufacturing industry where the sale price to the great mass of consumers is fifteen times the cost of production of the article sold.

"Among the users of your product, the class which is greatest in numbers is that vast body of men who every month pay a 6 cent charge in their households for an article which we are constantly told is being produced in efficient electric stations for from three-tenths to four-tenths of a cent."

He added, "This excess price is a weakness which calls for the keenest thought in your deliberations." That "dynamite," as the press dubbed it, ended any real influence of the United States power combine

in the conference and over the world. Sackett's remarks were applauded by liberals amid silence from opponents of the Norris Muscle Shoals bill. Commented editor Lowell Mellett, of the *Washington (D.C.) News* on June 20: "That part of the speech which was to be censored has now been applauded by the World Power Conference and studied by millions of newspaper readers and electric consumers."

It later developed that the National Electric Light Association had put up \$25,000 for the conference; that the American delegation consisted of hand-picked utility men; and that Secretary Wilbur had selected Bonner to represent the Federal Power Commission but withdrew the appointment after the egg-throwing affair. Insull's boner was another misfortune for Hoover and the party that Insull had strongly supported in the fall campaign—his last venture in politics before the collapse of his empire.

Background of Prime Movers. Throughout his long career as chairman of the board of the mighty Electric Bond and Share Company, Sidney Z. Mitchell was the able, ruthless, tough-minded bellwether among utility executives opposed to the Federal Water Power Act. It was Mitchell's Washington lobbyist, Leighton, who attempted to instruct Solicitor Russell of the Federal Power Commission on what was expected of him.

Mitchell was determined that one of his subsidiaries, the Appalachian Electric Power Company, be given a "minor part" illegal license to build a power plant on the New River near the town of Radford in western Virginia. The license had been approved by the state of Virginia but refused by O. C. Merrill in 1927. Mitchell had hoped that Hoover's Federal Power Commission would be more reasonable. If not, he was ready to go to court to have the power act declared unconstitutional.

Another relentless foe of federal regulation was Howard C. Hopson, creator of the fabulous holding company, Associated Gas and Electric Company, which went into receivership after he was sent to prison for illegal practices. Hopson had warred unsuccessfully with the power commission in an attempt to induce it to grant one of his subsidiaries, the Clarion River Power Company, a final 50-year license on a small river in western Pennsylvania. He failed because, as accountant King had told the Couzens committee, his company claimed a net investment of \$6,387,731 in the plant, 55 percent of which was fictitious write-up.

The President Requests a Legal Opinion. When a law clearly in the public interest was likely to be challenged it was the custom of

Theodore Roosevelt to enforce it until the courts declared the law unconstitutional. Taft and Hoover were not of the same persuasion.

The records reveal that in the absence of Congress and before the five-man commission created by the Couzens act could take office in December 1930, the Federal Power Commission's Bonner, with the support of Secretary of the Interior Wilbur, urged the commission to approve the Appalachian Company license. At this critical juncture, with legal action pending, Hoover entered the arena and requested an opinion from Attorney General Mitchell whether it was permissible for the Commission to approve the Appalachian Company's application.

The power act authorized the Federal Power Commission to issue short-term permits to utilize a small power site for a strictly temporary purpose without forcing the lessee to comply with the requirements of a 50-year license and Federal regulation. This was known as a "minor part" license. On September 22, 1930, Mitchell advised the President that a minor part license could be issued on the 185,000 horsepower site; that the New River was a nonnavigable stream wholly within the state of Virginia and outside federal jurisdiction. Mitchell's letter concluded: "This interpretation appears necessary in order to avoid serious questions regarding the constitutionality of the act . . ." The opinion was, although indirect, a virtual admission that the power act was unconstitutional and was so regarded on both sides of the controversy. The power trust was pleased.

A month later came an opinion from the acting chief counsel of the Federal Power Commission, J. F. Lawson, who had been bypassed in the matter. He stated that for many years the government had exercised jurisdiction over the New River because it was an important tributary of the Kanawha and that the Kanawha River was an important tributary of the Ohio River. Lawson showed that from 1872 to 1928 Congress had appropriated a total of \$115,000 for improvement of New River, both as to navigation improvement and power development.*

For some reason the electrical industry had never questioned the validity of the power act. Now, with the Couzens bill for more rigid regulation already passed, and the Norris bill for government operation of Muscle Shoals in danger of adoption, the time for resort to the courts had arrived. As laymen and some legal minds saw it, a green light had flashed from the White House.

Action speedily followed, first by Hopson, then by Mitchell. On October 2 the Clarion River Power Company was notified to appear

on November 5 for a hearing on the claimed "net investment." But on October 24, 1930, the Company filed suit in the District of Columbia Supreme Court to restrain the Federal Power Commission from holding the hearing on the ground that the commission lacked jurisdiction. A few months later, when its time came, the Appalachian Electric Power Company followed the same course.

Answering the Attorney General. Late one rainy night in September my wife and I returned from a three-week auto trip investigating the Crisp County, Georgia, power plant, the first county plant in the country. As I unlocked the door we heard the telephone ringing and hastened to answer. Solicitor Russell was calling to inform us the power people were plotting to undermine the power act. A few days later the Mitchell opinion was handed to President Hoover and Russell was outraged. If the government conceded unconstitutionality, who could successfully defend the Power Act in court? he asked.

Here was a grave crisis. Direly needed was a rejoinder demolishing Mitchell on which we could get national publicity. No government attorney who knew the law and the case dared open his mouth for fear of instant dismissal. After vainly waiting a few days for some lawyer to speak up, I had Mitchell's opinion mimeographed and mailed to a dozen prominent lawyers who were unafraid and knew utility law.

There was one attorney whose standing overshadowed that of Mitchell—former Federal Judge George W. Woodruff, then in retirement, whom we have previously encountered as solicitor for the Interior Department under Theodore Roosevelt. For a quarter century Woodruff, a Republican, had been the leading legal authority in the conservation movement. Would he cross swords with Mitchell and Hoover? I went to his home in Berwyn, near Philadelphia, to find out. I shall never forget that interview as an exhibition of righteous wrath on the part of a mild-mannered gentleman. Woodruff was a man of fine physique (a football star at Yale) and possessed of a natural dignity. He was in his garden when I arrived, and as I waited for him in the living room I noticed the Mitchell opinion I had sent him lying on a card table by my chair. Entering he greeted me, picked up the document without another word and, still standing, began discussing it with deep but well-controlled emotion—in substance thus: "I have been expecting this move for a long time. It is what the power interests want and to my personal knowledge have been scheming to secure. It is unsound and violates every provision of the power act. I helped draft every line of that act and I think I know. If this becomes a precedent and stands, then 25 years of effort to protect our vast water

power sites in the interests of this generation, and those to come, is swept away. The public stewards have become the friends of the exploiters of public property. The crisis is very grave indeed."

I must confess that in publishing this verdict later I toned down one sentence. What Woodruff really said was: "The public stewards have become friends of the thieves of the people's property." He continued: "Let me tell you how I know who and what is really back of all this. Since my retirement from the bench I have resumed practice to a limited degree. One of my clients is a coal company which buys its electric power from this Appalachian Company, now asking a minor part license, which is controlled by American Gas and Electric and in turn by Electric Bond and Share. A member of Bond and Share's principal law firm who has charge of Appalachian's affairs, chances to be an old friend and Yale classmate of mine. In meeting to negotiate our contracts we have frequently lunched together and he has repeatedly urged upon me the identical legal doctrines contained in Mitchell's opinion. In the indirect fashion in which such proposals are made, I was given to understand that if I would carry a case to the United States Supreme Court to have the Power Act declared unconstitutional I could name my own fee. Of course I turned the offer down—do you suppose I could attempt to murder my own child?"

After further discussion I said: "Well, I am down there in Washington fighting this thing, practically alone. Will you come down and help?" He answered "I will" and he did. A few days later I was able to release to the press and mail to key government officials a memorandum by the Judge which tore Mitchell's legal opinion to shreds. It began:

"The Attorney General's opinion in this case is neither good law nor good administration; and it is neither a fair nor correct nor full statement of the essential facts concerning the Federal Water Power Act and its enactment, and concerning the status of New River as a navigable or non-navigable stream.

"Apparently the failure is due to such haste and oversight of history, law and facts as ought to cause the Attorney General to recall his opinion, and, if he finds that factual study warrants such action recall it from the President and the Federal Power Commission for correction and resubmission. During such reconsideration the Commission should delay action on the request of the applicant power company."

Wrecking Regulation Also. The release was followed up by a

National Popular Government League bulletin, No. 140, "Wrecking Regulation; Also A Summary of the Past 19 Months of the Power War," which we mailed to Washington correspondents and to all sections of the country. The bulletin recited the facts set out above, quoted Judge Woodruff and Professor John H. Gray, a noted authority, and charged that the President was the real leader in the drive to nullify the power act. It confirmed Judge Woodruff's statement about the real source of legal attack by revealing that Mitchell's opinion was actually prepared at Hoover's request by Charles W. Thatcher, Solicitor General. Thatcher was a member of a New York law firm which for many years counseled the Electric Bond and Share Company, prime mover in the whole scheme. By lucky chance, the pamphlet, dated October 20, 1930, was issued just in time, four days before the Clarion River lawyers filed their suit in the Supreme Court of the District of Columbia.

Intervention Is Sought. Not knowing who would be picked to defend the case for the government, Judge Woodruff advised intervention and suggested that I, as the executive director of the National Popular Government League, sponsor the petition, on behalf of the league's members. The petition, written by the judge and filed with Justice Jesse C. Adkins on November 13, 1930, was also signed by 16 outstanding attorneys, among them Frank P. Walsh, soon to become chairman of the New York Power Authority; Felix Frankfurter, Harvard Law School Professor; Jackson H. Ralston, of Washington; Nathan E. Kendall, former governor of Iowa; Donald R. Richberg, of Chicago; Lawrence G. Brooks, of Boston; and Francis G. Heney, of San Francisco.

The petition reviewed the 15 year struggle to pass the power act and eight years of failure in attempting to achieve proper administration. It charged that the utilities were seeking to destroy the law, as Theodore Roosevelt predicted, "by every means which money can buy and the ingenuity of able corporation lawyers can devise." The Attorney General's opinion, it charged, "endangers the rights and interests of all citizens . . . Intervention is sought only to assist in protecting the public interest in the upholding of the power and jurisdiction clearly granted to the Federal Power Commission."

Judge Adkins denied our request to intervene by argument but allowed the attorneys and the Attorney General of Pennsylvania to file briefs. The publicity given the affair had its effect. Solicitor Russell, the "stormy petrel" of the Federal Power Commission who had been selected to defend the government, won in brilliant fashion.

On January 29, 1931, the plea for an injunction was denied. Judge Adkins' decision was upheld in the higher courts. This effort to "get around the law" had failed.

The New Commission Is Appointed. By the time the fateful 71st Congress convened for its regular session on December 1, 1930, the conflict centering around the Federal Power Commission was charged with as much political dynamite as the earlier debates over Boulder Dam and Muscle Shoals. Voters still considered the two projects to be local problems, but everybody shared the concern about high electric rates and holding company writeups. The Power Commission scandals were sometimes comic but sometimes aroused indignation, too.

President Hoover was on the spot. If he appointed a new commission of able, fearless men who would enforce regulation, he would be certain to offend his most influential supporters, the power company executives. Otherwise he would offend the voters. Announcement of his appointees was awaited with great interest. He sent the following names to the Senate for confirmation two days after Congress assembled: Dr. George Otis Smith (Republican), of Maine, veteran chairman of the United States Geological Survey; Claude L. Draper (Republican), member of the Wyoming state public service commission; Ralph B. Williamson (Republican), an attorney at law in the State of Washington; Colonel Marcel Garsaud (Democrat), civil engineer and ex-manager, Port of New Orleans Commission; Frank R. McNinch (Democrat), attorney and former mayor of Charlotte, N. C.

The list was respectable but not convincing. Not one was qualified by training or experience to cope with the tremendous problems at stake. On the other hand, with no pertinent records behind them, none could be classified as partisans. The Couzens Interstate Commerce Committee approved them and after brief hearings they were confirmed by the Senate. Only two met resistance: Smith aroused the suspicions of liberals by his somewhat equivocal answers to questions regarding his position on minor part licenses, stock inflation, and the preference clause. McNinch had opposition from some southern Democrats because he, a strong prohibitionist, had bolted his party to head a campaign committee for Hoover.

It was a gloomy and puzzling situation, and the President was a stubborn man. The Wilbur commission had followed his orders. Would the new commission obey him? I determined to find out. Personal relations between Chairman Smith and myself were most friendly. I was genuinely sorry to see such a distinguished scientist jeopardize a lifetime reputation for public service by accepting this

appointment and getting into this mess. That is what I told Smith when I called on him. "But why?" he asked me. Answer: "Because Hoover is determined to break the power act and has picked you as his man for the job." Smith took this in good humor, showing no anger. A two-hour discussion followed during which he demonstrated from a stack of his printed addresses what a faithful friend of conservation he had always been. But he did not refute my charge as to the President's intentions nor did he give me assurance he would stand by the law. I left with gloomy forebodings.

Three Commissioners Take Command. Confirmed on Saturday, December 20, Chairman Smith and Commissioners Garsaud and Draper were sworn in on Monday and took charge. Commissioners McNinch and Williamson, not yet sworn in, had gone home for the holidays with the understanding that nothing would be done until they returned. On Tuesday Solicitor Russell and Chief Accountant King found on their desks curt notices of dismissal, signed by Chairman Smith. No advance notice had been given and no reasons were assigned. Executive Secretary Bonner got one too, but he had already resigned and was given a position in the Reclamation Service by Secretary Wilbur. Both Russell and King were dependent on their salaries. Their dismissals came practically on Christmas Eve and aroused public sympathy. Liberals saw the dismissal of the two men whose refusal to violate the power act had forced the scandals of nonenforcement into the open as a startling indication that the President did not intend to enforce regulation of power companies or defend the constitutionality of the power act itself. Republican Senator Brookhart announced that an attempt would be made to reconsider the Senate's confirmation of the three commissioners. The attempt was made. My scrapbooks of the period are filled with articles with screaming headlines reporting an "unprecedented episode in American history" and "New Phase of the Power War." It proved a bitter battle.

The Senate Would Recall The Three. On January 9 the Senate voted 44 to 37, requesting the President to return the nominations of the three commissioners for reconsideration. The President declined but responded with a stinging attack on the Senate's action: "I cannot allow a false issue to be placed before the country. There is no issue for or against the power companies." He added: "The resolution of the Senate . . . may contain a hope of symbolizing me as the defender of the power interests if I refuse to sacrifice three outstanding public servants or to allow the Senate to dictate to an administrative board the appointment of its subordinates, and if I refuse to allow fundamen-

tal encroachment by the Senate upon the constitutional independence of the Executive . . . It will be recalled that on my recommendation the Federal Power Commission was reorganized . . . If the Power Commission had failed to employ honest and capable officials, it is within my power to remove such officials as well as members of the Commission. I have and shall not hesitate to exert that authority.”⁸

The Senate resented Hoover’s assumption of credit for the Couzens reorganization act. Hoover had kept silent about the Power Commission scandals until it was fairly clear what Congress would do about it. In the debate Walsh, Norris, Dill and others charged that Hoover was a power trust President attempting to mislead the public on the real issue, and, besides, had he forgotten that the Federal Power Commission was an arm of Congress, not of the Executive Branch?⁴

On February 4, 1931, on motion of Walsh, Smith’s confirmation was recalled by a vote of 40 to 33 and a suit was instituted to oust him from office. The sensational and unprecedented case occupied the headlines for several months. Such distinguished attorneys as John W. Davis, Democratic nominee for the presidency in 1924, were employed by the Senate, and ex-Senator George Wharton Pepper represented the President.⁵ The Supreme Court held with the President. Smith kept his chairmanship, but the fight hurt Hoover. He had definitely pledged himself to enforce the regulatory provisions of the power act, but the first action of his new commission shattered all faith in that promise.

The New River Case. The next major move of the Federal Power Commission was to give priority to the New River case.

It was well known that Chairman Wilbur and Secretary Bonner had been intent on issuing a minor part license to the Appalachian Power Company but were unable to get Commissioners Hurley and Hyde to agree. At the final meeting of the old commission, on November 15, 1930, a remarkable decision was reached, as shown by the 11th report of the Commission.⁶ Bonner recommended that the commission issue the minor part license—“in accordance with the opinion of the Attorney General.” But “after due consideration the commission declined to take action upon the application favorable or adverse. It was concluded that in view of the importance of the questions of jurisdiction as between the United States and the state of Virginia involved in this case a court adjudication is desirable.”

As soon as the new commission was organized, five weeks later, the Appalachian Company renewed its application for a minor part license. Pressure was brought for immediate action. A. E. Carson, chairman of the Virginia State Corporation Commission, which had given the

company a permit to build a dam, persuaded Chairman Smith, to hold a hearing. Everyone predicted favorable action.

The hearing was held, February 16-17, 1931, in a large room overflowing with power company representatives and representatives sent by the governors of Virginia, West Virginia, Kentucky, Alabama, Tennessee, and Arkansas, to support the Appalachian Power Company. The line of argument was that the country was in a great depression with millions unemployed. In the five states besides Virginia the power companies were ready to invest millions in new projects that would restore prosperity if given minor part licenses, but they would not yield to federal regulation. The New River license would set a precedent. Attorney General Mitchell was right, speakers contended. The commission could act at once in behalf of the nation's welfare. The atmosphere was that of a friendly gathering of states' righters. No opposition was expected or desired. The outcome seemed foreordained. The commission would follow the President and the Attorney General. Something must be done.

During an afternoon recess on the second day, I asked Chairman Smith permission "to make a request." On reassembling he stated that Judson King of the National Popular Government League had requested permission to address the commission but since he could not be considered a proper party in interest the commission would deny the request. Springing to my feet, I called out heatedly, "Mr. Chairman, I made no such request!" Surprised, he hesitated and before he could gavel me down I charged that the people's side of the issue was not being heard; that I asked for a hearing at which it could be heard. Commissioner Williamson snapped: "Does not this commission represent the people?" I responded, in essence: "That is not the question. You sit here as a quasi-judicial body to decide a question which is new to you. I desire you to listen to Judge George W. Woodruff, who more than any other man wrote the law you are administering. He will prove to you that the water power act has here been grossly misrepresented by the attorneys of the power trust and their friendly politicians."

The effect was electric. A hundred unfriendly eyes glared at me. Carson of the Virginia State Corporation Commission jumped up, calling out, "Who is this man who talks about the interest of the people? I protest his intervention." I was told I could file a brief for my organization. Refused a public hearing, I protested that it was necessary if the people were to know the facts. A mere brief would not do. Williamson said curtly, "It will have to do."

A dozen bored correspondents for the great news agencies and various independent papers came awake. For hours they had been waiting for something to indicate "the slant" of this new commission, and the next morning the press featured my "row" with the commission at its first open hearing. Ruth Finney's story for the Scripps-Howard papers, as it appeared in the *Washington Daily News*, was headed: "Power Body Refuses to Hear Public on New River Project." The *Washington Herald* headed the dispatch by Fulton Lewis, Jr., then a cub reporter for Hearst's Universal Service: "Smith Refuses People's Plea in Power Case. Federal Interests Side in Vital New River Case Requested."

Pennsylvania's Governor Gifford Pinchot, learning of this episode, at once wired the commission for permission to intervene in the public interest. I disliked this sort of warfare, but my friend Dr. Smith had made it necessary. The incident had tagged the commission as subservient to the power trust.

Commissioner Williamson Is Troubled. When the hearing adjourned, Commissioner Williamson asked me to accompany him to his office. He was deeply troubled. He said very earnestly: "Mr. King, do you mean to tell me that Judge Woodruff is against this minor part provision and believes it destructive of the power act?" After I related my interview with the judge, Williamson told me: "You see, I was a cub lawyer under Judge Woodruff when he was solicitor of the Interior Department in TR's day. I have a very high regard for him both as a lawyer and a public servant. The situation is becoming far more serious than I at first anticipated from what I have been told."

A Call On Commissioner McNinch. Soon after I called on Commissioner McNinch. At the hearing he had appeared to resent my conduct as unseemly—that of a soapbox zealot. I told him frankly that I sought an interview because Senators Norris and Brookhart had told me that they considered him the most likely member of the commission to adhere to the letter and intent of the power act and remain unmoved by politics and power trust pressure; that I wanted him to know my action had been made necessary to expose Hoover's attempt to make a shambles of the power act; and that since public utility regulation was a new field for him, I had a store of information on the subject if he desired it.

McNinch took this as a personal reflection and said sternly: "If that is the President's intent why did he appoint me on this commission?" I replied: "That is very simple, Mr. McNinch. You are a Southern Democrat who bolted your party, fought Al Smith and headed up a

splinter faction to help elect Hoover. This is your reward and notice to other Southern insurgents for future campaigns. He simply takes for granted that you will go along and obey orders." McNinch demurred, saying he could not think it possible that I was correct, but within a few weeks we were on friendly terms and the friendship lasted until his death.

More "Disharmony." The three members of the new commission had peremptorily discharged Russell and King to end disharmony, but now disharmony broke out within the commission itself. Chairman Smith and Garsaud were intent on granting the minor part license but McNinch opposed it with the support of Draper and Williamson. It was a great news story and Congress and the nation became aware of the fundamental issue at stake. The result was denial of the minor part license. On June 8, 1931, the Appalachian Company, practically on behalf of the entire electrical industry, filed suit in the United States District Court at Norfolk to restrain the commission from requiring a regular federal license and thus test the constitutionality of the Federal Water Power Act.

As in the Clarion River case, the question arose concerning the trustworthiness of the attorney selected to defend the act. Smith favored a lawyer in whom McNinch had no confidence. Newton D. Baker, secretary of war in the Wilson administration, would appear as chief counsel for the power companies. McNinch held that a lawyer of comparable capacity, well known to the public as a believer in the purposes of the power act, should be engaged to oppose Baker and thus establish confidence in the rectitude of the commission. To that end he urged the appointment of Huston Thompson, former chairman of the Federal Trade Commission. A bitter fight within the commission followed, lasting for weeks. Finally McNinch telephoned me one night and said worriedly and sadly "Judson, I am sorry to tell you we have lost. The majority will not accept H.T." "Very well," I replied, "this is outrageous and very serious. You need help. There are six 16-inch guns on Capitol Hill all primed and ready for action. I mean six Senators. Tell my friend Dr. Smith that if Huston Thompson is not engaged within 48 hours they will turn loose and we will see whether or not the public interest will be betrayed." The warning may or may not have been the only cause of reversal. At any rate, Thompson was appointed the next day.

Nine Years of Legal Warfare. The legal warfare thus begun lasted for nine years, during which 41 states joined the power trust in its effort to have the power act declared unconstitutional on the ground

that the federal government had no concern over river development except in the promotion of navigation. The rest should be left to the states. It was not until December 6, 1940, that the Supreme Court, setting aside adverse decisions of lower courts, sustained the act.

The following sentences from the Supreme Court decision should have put an end to 40 years of bickering: "In our view, it cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation . . . In truth the authority of the United States is the regulation of commerce on its waters. Navigability . . . is but a part of this whole. Flood protection, watershed development, recovery of the cost of improvements through utilization of power are likewise part of commerce control . . . Water power development from dams in navigable streams is from the public's standpoint a by-product of the general use of the rivers for commerce . . . the point is that navigable waters are subject to national planning and control in the broad regulation of commerce granted the Federal Government."⁷

The next year the Supreme Court held further. The state of Oklahoma had challenged the right of the federal government to build, without its consent, the Dennison Dam on the Red River at a point above the head of navigation. The decision, in what is known as the Atkinson case, stated very clearly that the federal power extended to all nonnavigable tributaries of navigable rivers as essential to river control and multipurpose projects.⁸ Thus, after 40 years, the law had caught up with modern engineering and common sense. The principles laid down by scientists of the caliber of Dr. W. J. McGee and engineers like Arthur Powell Davis were placed beyond doubt as fixed national policies—or so it seemed.

The 1930 Election Background. It requires a far abler pen than mine to characterize the high hopes and expectations of the electorate which gave Herbert Hoover such an overwhelming victory in 1928. For them a new era in politics was dawning. An article, "Why I Am For Hoover," by Roy W. Howard appeared in *Collier's* magazine three weeks before election day. Howard was chairman of the board of the Scripps-Howard chain of newspapers. Its founder, E. W. Scripps, had enlisted public confidence by his liberal policies and independence. When I visited his home in 1910, Scripps told me of his instruction to all his editors to support labor progressives like LaFollette, Norris and Hiram Johnson. He had also founded the United Press in 1907 as an offset to the conservative policies of the Associated Press. By 1927 the wire service and the Scripps papers had become the Scripps-Howard chain,

with Roy Howard as chairman of the board and president of the United Press. In his *Collier's* article, Howard explained why the chain was supporting Hoover. "Here was a once virile Republican Party, grown fat, flabby and corrupt," he wrote. Hoover was a clean, strong man who "would not stand for graft and corruption." He would "thrill America with constructive achievements" and give it "good, safe and new direction." Then this: "We are by no means sure that we will agree with the methods he will employ in dealing with the great problem of super-power. But even in our disagreement we have faith in Hoover. We believe that facts, not emotion or political expediency, will govern his actions."

There were many mistaken liberals supporting Hoover. *The New Republic* on October 17 published results of a straw vote of 176 liberal leaders: Hoover received 65; Smith, 86; and Thomas, 25. Businessmen were largely for Hoover; the intellectuals were for Smith or Thomas.

Judson C. Welliver, distinguished editor of the *Washington Herald* of the Hearst chain (pro-public power also) was even more optimistic than Roy Howard. As early as June 28, 1928, Welliver ventured a prediction. His signed article was captioned "Hoover's Speech to Declare Against Power Combine"; and the subhead, "Candidate's Address of Acceptance to Give Party Stand on Vital Questions Evaded by Platform Makers." Hoover, he wrote, was "much disappointed" over the deliberate exclusion of such a plank from the party platform. Where the usually reliable Welliver got his tip he did not reveal; what he predicted is exactly what the candidate did not do at Palo Alto and candidate Smith did do in his acceptance speech at Albany.

Far from their former hopefulness that Hoover would be honest and fair in power matters, many liberals became so impressed with the political power of the utilities that they regarded Senator Norris' fight as hopeless.

President Hoover appointed an outstanding commission to study and report on law enforcement. Roscoe Pound, dean of the Harvard School of Law, was a member. Dean Pound had supported me in a fight in 1919 against Attorney General Mitchell Palmer's "red raids" and signed a brief known as "The Report of the 12 Lawyers on the Illegal Practices of the Department of Justice." We were on cordial terms. During a long conversation he advised me in a friendly manner to quit wasting my time on the power issue and said—his words are still etched on my memory—"Don't you know that Wall Street will soon take over Muscle Shoals just as I pick up this box of matches?" He suited action to the words. It was discouraging, though given with the best of intentions,

for I knew he had a deep understanding of forces in a democracy and the power of Wall Street. I could only reply, "Well, we'll be in there fighting when they take it."

Another Landslide, in Reverse. The 1930 elections were a Democratic landslide of greater significance than the Republican sweep of 1928. Democratic governors replaced Republicans in the states of Massachusetts, Connecticut, Ohio, Kansas, New Mexico, and Idaho. Minnesota elected a Farmer-Laborite and Oregon elected an Independent. Only South Dakota replaced a Democrat with a Republican. In Pennsylvania, veteran Republican conservationist Gifford Pinchot had won in the primary election, causing the private utilities and railroads to bolt to the Democrats along with the powerful Vare machine in Philadelphia—something they had not done since the party was founded.

The Republican majority in the Senate was reduced from 16 to one. But since Shipstead, Minnesota Farmer-Laborite, was militantly pro-public power and usually voted with the Democrats the advantage in the power field was tenuous. The change in the conservative House membership gave clearer evidence that a political revolution was afoot in the land. The unprecedented Republican majority of 162 was reversed to a Democratic majority of 12 plus one Farmer-Labor member.

This political reversal was caused by Hoover's refusal to use federal powers and his reliance on the voluntary aid of Big Business to deal with the depression; his signing of a high tariff bill, after promising reductions; and his failure to enforce prohibition. Conservation of natural resources and public power were also major factors, as editorial comment from all viewpoints plainly showed. Muscle Shoals had become a weather signal. Would the Administration take heed?

CHAPTER XXI

THE NORRIS COMPROMISE BILL

At the turn of the century only a small minority of the American people understood the importance of hydroelectric power as envisioned by the leaders of the conservation movement and the electrical industry. But by 1931 the vast majority was acutely aware of its significance. The hour had struck for social control not only of the nation's water power but of the entire electrical industry.

Against this background of public opinion a two-year battle was waged between Hoover and Congress over Muscle Shoals. Progressives had interpreted a campaign statement to mean he would "make an exception" of the Shoals and sign the Norris bill that Coolidge had pocket-vetoed. They were doomed to disappointment. In his first annual message to Congress on December 3, 1929, Hoover said:

"It is most desirable that this question should be disposed of. Under present conditions the income from these plants is less than could otherwise be secured for its use, and more specifically the public is not securing the full benefits which could be obtained from them.

"It is my belief that such parts of these plants as would be useful and the revenue from the remainder should be dedicated for all time to the farmers of the United States for investigation and experimentation on a commercial scale in agricultural chemistry. By such means advancing discoveries of science can be systematically applied to agricultural need, and development of the chemical industry of the Tennessee Valley can be assured.

"I do not favor the operation by the Government of either power or manufacturing business except as an unavoidable byproduct of some other major purpose."

Hoover proposed that Congress establish a commission to negotiate contracts for operation of the government plants. His pronouncement, like the ambiguous "high dam" statement on the Boulder project, engendered debate as to its meaning when the nation expected clarity. He appeared to favor leasing. But suppose Congress should hold that public power was an "unavoidable byproduct." Would he veto the Norris bill? Some said "yes" and others said "no." Editorial opinion conflicted and there was uncertainty for a year and three months.

The Senate Stands Pat. Coolidge pocket-vetoed the Muscle Shoals

bill passed in May 1928. A year later (May 27, 1929), in the case of the Ontonagon Indians, the Supreme Court decided a pocket-veto was valid. On the next day Senator Norris reintroduced his bill, now numbered Senate Joint Resolution 49. The Committee on Agriculture reported the bill favorably one week later when it was agreed to consider it immediately after the Smoot-Hawley tariff was out of the way. This caused a delay of ten months. The Norris measure was passed on April 4, 1930, by a vote of 45 to 23. Only two major speeches were made, one by Norris for the liberals and one by Fess for the opposition. Fess deftly avoided concrete issues, declaring himself a follower of Jefferson and chiding the Democrats for abandoning the doctrine that the least government was the best. He would not junk the project but would keep the government out of business by leasing it. His motion to strike out government construction of Cove Creek dam was defeated without roll call.

Norris, for the benefit of new members, reviewed the history of the project—emphasizing the reasons why the problem had not been settled long ago. He used as an example the American Cyanamid Company bid again under consideration by the House and backed by the American Farm Bureau Federation. Norris inserted in the *Congressional Record* an analysis made of the American Cyanamid bid by O. C. Merrill, secretary of the Federal Power Commission. The analysis revealed that approval of the bid would mean an additional investment by the government of \$69 million. Also involved was a subsidy of \$4.4 million to induce the company to undertake fertilizer production with no guarantee of full-scale continuous manufacture. Southern Senators were still insisting on the leasing of Nitrate Plant No. 2 for fertilizer operation. It was noteworthy, however, that a large majority led by Hugo Black was now against the leasing of the power plants, Heflin included.

Vandenberg and Taxes. The federal government had never paid taxes on its own properties or activities. Senate Joint Resolution 49 provided that five percent of gross income from electric power sales should be given to the states of Tennessee and Alabama "in lieu of taxes." Senator Vandenberg of Michigan, supported by a majority of his Republican colleagues, made a prolonged fight to strike this provision from the measure and nearly succeeded. He argued that the states had never been given the right to tax federal properties or functions within their borders; that the southern states had "not mentioned taxes" when the project was authorized; that "the advantages that flow from the development are incalculably greater than the taxes which

would attach to this comparatively undeveloped sector"; and that a "cash dole" in addition to spending so many millions on the project could not be justified. He agreed to vote for the Norris bill if the tax feature were eliminated, although he favored private operation. His reason was that no acceptable bid had been received and furthermore, "it is my information that there probably never would have been any such comprehensive development under private auspices at any time."

Norris agreed in principle with Vandenberg's position on the taxation of federal properties, but pointed out that if the government took over real estate and other properties on which states and communities ordinarily collect taxes they would lose access to revenues needed for schools and other public purposes. Since the government would be going into business, Norris thought it only fair to pay the amount of state and local taxes that private companies would pay but not to include federal taxes. He explained that power companies paid from 1.4 to 12.2 percent of their gross revenues in state and local taxes and that 5 percent would be a fair payment on wholesale power only. Vandenberg's motion was defeated, 34 to 32, a close vote; 25 Republicans and 6 Democrats voted with him.

A Signal Gun Majority. At the conclusion of this debate on April 4, 1930, the Muscle Shoals bill was passed for the second time, 45 to 23, exactly 13 months after Mr. Hoover came to the White House. Analysis shows that 26 Democrats, 18 Republicans and one Farmer Laborite voted for the bill. All the Administration could muster was 21 Republicans and 2 Democrats in opposition.

A signal gun had been fired. Under no circumstance would the Senate surrender control of the Tennessee River, including its power, to private interests under the guise of fertilizer production.¹

Reece at the Helm. Fortunately for the Hoover faction, when the Norris bill got to the House, chairman W. Frank James of the Military Affairs Committee was in Walter Reed Hospital. Acting chairman Harry C. Ransley, a Republican conservative, appointed a subcommittee to draft a substitute. The committee was headed by the President's lead man in the House, B. Carroll Reece. The Reece draft was substituted as an amendment to the Norris bill (S. J. Res. 49,) and was reported favorably by the full committee on May 12. There was no time to lose. With Speaker Longworth in command, a special rule was obtained and "the Reece bill" came up for floor debate on May 27, 1930.²

The "amendment" gave the House its first look at what Hoover wanted done. As McSwain pointed out in his minority report, the

fundamentals on which the House had acted for eight years had been disregarded. He correctly predicted that "the country will be shocked."

The President was empowered by the measure to appoint a leasing board without any requirement of Senate confirmation. The board could make several leases and split the project. When approved by the President, the leases would constitute a valid contract for 50 years without being examined or agreed to by Congress. The fertilizer provisions were slightly improved but most of the old jokers were retained. There would be return of the plants if a lessee flunked. Power was to go to the companies. A "holding company" or other lessee must build the key Cove Creek dam if it were ever built, and it could be recaptured by the state of Tennessee, but not by the federal government. The substitute dismissed Congress and gave Hoover sole command.

Debate was limited for good reason. The members knew how they would vote and they were sick of Muscle Shoals. Besides, the Smoot-Hawley tariff bill was still under discussion. In the two-day tussle party lines were shattered. One side held with Hill of Alabama that if the bill passed "Muscle Shoals will go into the hands of the power and fertilizer trusts forever." The other side scoffed at such charges. "Can't you trust the President of the United States?" In polite language the answer was "No."

The Issue of Low-Cost Power. The high cost of power came up constantly. In a closing speech Rep. Crosser of Ohio exhibited the large chart I had prepared for Senator Norris comparing the average cost of domestic service in the United States and Ontario from 1910 to 1928. Representative Dempsey, a Republican who lived within 30 miles of Niagara Falls, charged Crosser with making an unfair comparison. Domestic rates, he asserted, were low in Ontario because industrial users (the big load) were charged much higher rates than in our country. This argument of "robbing industrial Peter to pay domestic Paul" had been vended to business men for years and many congressmen believed it. From the gallery, my wife and I saw Crosser signal to a page. When Dempsey sat down the page brought another big chart of mine on industrial rates. Plainly ruffled but polite, Crosser proved from data in the pro-private power *Electrical World* that our manufacturers were paying an average in 1928 of 13.4 mills per kilowatt hour while the Ontario costs were only 6 mills, less than half as high. The dramatic rejoinder had its effect—Dempsey kept silent. Both charts were printed in the May 28, 1930, *Congressional Record* and can be found at page 9752.

The House Bows to Hoover. The Reece substitute passed, 186 to 135, with 105 not voting. Thirty-one Democrats joined 155 Republicans in approval while 42 Republicans and one Farmer Laborite teamed up with 92 Democrats in opposition. Geographically, the Yea vote came from the East and the South and the Nay vote mainly from the middle states and the West. The House had, under pressure, rejected the Senate bill. The Senate refused to agree. The two bills went to conference where they remained for nine anxious months during which the 1930 election was held.³

Deadlocked Conference. After the bills had been in conference for a week, Senator Norris in a statement to the press, June 7, 1930, reported a deadlock and told why. Four days later Representative Quin of Mississippi got the floor and made a sensational plea to Reece to break the deadlock and allow the House to vote on the proposed compromise. He explained that the Senate managers, McNary, Norris, and Smith (South Carolina) insisted on government control of the project. However, they had offered to permit the House managers to write their own provisions authorizing President Hoover to lease the fertilizer facilities under certain conditions. To this, Quin and Fisher of Tennessee had agreed, thinking the terms reasonable. But Ransley and Wurzbach, a Texas Republican, had declined. Reece had been absent; would he not now accept the compromise and get the action so much needed?

Quin, the "Gentleman from Mississippi" was an unique character. Son of a Baptist minister-farmer from southwestern Mississippi, teacher, and then lawyer, he had been a member of the House Military Affairs Committee ever since he came to Congress in 1913. He had voted for the 1916 Defense Act provision that dedicated the Muscle Shoals plant to national defense and its fertilizer to farmers in peacetime. In the tone and language of a Baptist revivalist exhorting sinners to repentance, Quin besought Reece and his group to "come to the mourners' bench," and deliver the country from the clutches of the power trust by signing the conference report so that the House could vote upon it the next day.

Reece calmly declined. No company would sign a lease under the Norris terms, he said. Wurzbach stood by him.⁴

The President Stands Pat. The 71st Congress adjourned on July 3, 1930, and assembled again for its final session on December 1. The Republicans had lost control of the House in the November elections, but President Hoover stood pat on Muscle Shoals and the power issue. In his message to Congress he had only this to say: "I have in a previous

message recommended effective regulation of interstate electric power. Such regulation should preserve the independence and responsibility of the States."

Despite Hoover's indifference to election results, many Republican House members were alarmed. B. Carroll Reece had been defeated despite Hoover's personal campaign letter urging his return. Wurzbach of Texas had become Republican top man on the conference committee, but he had won his House seat only by a small majority.

An early settlement of the conference committee differences on Shoals bills was expected when Congress reassembled, but a month passed while the deadlock held firm. Then, restive Quin on January 6, 1931, again took the floor and told an anxious House who was to blame. Section 11 of the Senate draft expressly authorized the construction of transmission lines to be paid for "either from appropriations made by Congress or from funds secured from the sale of such power." Quin reported that "every single issue has been settled" except that Wurzbach insisted on omitting the words "or funds secured from sale of power." Why was this so vital? Because successful operation of the power plants could be delayed and wrecked if a hostile Congress refused money for transmission lines and if appropriations for the lines had to be authorized months in advance. A presidential veto, either of a bill authorizing the lines or a subsequent appropriation bill, could wreck successful operation. Since the language to which Wurzbach objected had been in a bill previously approved by the House, it was clear that conference Republicans were now doing a chore at the demand of the power trust. This was dangerous politics. Wurzbach took heed. The next day he yielded on the transmission dispute. The full committee met, agreement was reached with Norris, and Wurzbach was chosen to make the report to the House. But nothing happened.

Wurzbach Explains. Finally, John N. Garner, Democratic floor leader, on January 17 introduced House Resolution 340 to discharge the House conferees and appoint others to take their place. One week later Wurzbach explained the situation. He was trying to get a draft the President would sign and not have to call a special session after March 4 to act on Muscle Shoals. He was hopeful Hoover would sign if the lessee received the right to manufacture certain byproducts as well as fertilizer to full capacity of the plants. This would absorb all the power, and the vexing question of competition with the power companies would be eliminated. Would not the House give him more time? It did, and Garner's resolution was laid aside.

Quin, however, was skeptical. A week went by with no action.

Knowing that the report could have been made in two days, he took the floor and on January 31 delivered a revealing and caustic attack. He drew laughter when he began with, "I propose to discuss the Hidden Mystery, or Who Skuldugged Muscle Shoals in Conference."

Quin recounted that on January 7 a majority of the conferees consisting of Wurzbach, Fisher, and himself reached an agreement with the Senators. Wurzbach was authorized to write the House report. A photograph of the members was made, and the press agencies had carried the news. Then, "a trainload of telegrams" inspired by the power and chemical industries flooded the House in protest. The congressman charged that the Republican leaders had decided that no agreement should be reached and that Wurzbach had yielded, back-tracked, and taken Fisher with him. "You need not fool yourselves, these gentlemen do not intend to agree. They were forced away."

No incident in our narrative illustrates more clearly upon what seemingly small pivots great public policy matters can depend in this technological age. In this instance, the power trust seized upon a detail to gain its end. The issue of government transmission lines—vital to successful electrification—is still being raised in midcentury to defeat public power.

The Bill Passes the House. Three weeks went by. On February 19 the conferees made a report signed by McNary, Smith, and Norris for the Senate, and by Wurzbach, Quin, and Fisher for the House. Reece submitted a statement that he agreed to the fertilizer part, which he hoped would succeed; as a result all the power would be taken and no transmission lines would be needed. Ransley did not sign.

The House was first to act. Ransley and Douglas, Democrat of Arizona, called the fertilizer conditions too strict and predicted public power would follow. Wurzbach and McReynolds voiced the confident belief that Hoover would approve the bill because all the power would be used for fertilizer. Chairman James said he had not been interested in power but in national defense and fertilizer. "I am firmly convinced that the President can make a lease under the present bill. I sincerely hope you will stand by the four House conferees." The House did and approved the conference bill 216 to 153.

Three days later McNary moved to consider the Muscle Shoals report in the Senate. He had unanimous consent. There was no debate and in a matter of minutes the bill was passed. Shortly afterward, Bingham, Republican from Connecticut, returned from lunch, and expressed consternation at what had happened in his absence.

After some bickering, he was allowed an hour for discussion provided Norris use 20 minutes of the time to state the case.

Bingham led off with a warning against "tyranny." Johnson of California took some time to congratulate and to felicitate Norris in his hour of triumph. Then Reed of Pittsburgh, and others, took so much time none was left for Norris.

On a roll call, the bill passed 55 to 28 with 13 not voting.*

The White House was the final hurdle for the Norris compromise measure. Friend and foe alike took another look at its provisions to determine if Hoover would sign it as the "exception" to his basic resource views. The measure which had just been passed was the Norris bill which Coolidge had pocket-vetoed, reenacted. It retained absolute ownership and operation of the entire \$150 million project by the federal government through a government corporation. The bill provided that for twelve months following the passage the President might lease the nitrate plants for not to exceed 50 years. But the bill provided that conditions should be stipulated in any lease contract. The President could fix "fair and just" rental charges. A lessee must manufacture fertilizer and fertilizer ingredients "exclusively." Within "reasonable market demands" the output of fertilizer containing 10,000 tons of fixed nitrogen must be achieved within three years, and gradually increased to the full capacity of the plants. To make this output possible, the President could sell power to the lessee at the lowest price charged any buyer, up to the full capacity of the government power plants. To guarantee fertilizer production the bill stipulated that the lessee must manufacture fertilizer and not divert the plants to other chemical products except insofar as a useful byproduct would be produced in the process. For the production of such a byproduct, a 15 percent increase in power could be made available. Finally, no lessee could charge royalties on patents he owned or make a profit in excess of eight percent on the annual output. What would happen if a lessee honestly tried under these conditions and failed was left for future Congresses to decide.

The bill was in effect a challenge to industry to "put up or shut up" on fertilizer within 12 months or let Uncle Sam see what he could do.

The Veto Message. President Hoover vetoed the Muscle Shoals compromise bill on Tuesday, March 3. His message was handed the Senate in the midst of a heated debate over recognition of Soviet Russia but everything was suspended until the message was read. Jones of Washington then asked whether his conference report should not be laid aside since a veto message had higher privilege. Vice President

Charles Curtis, who was presiding, ruled no. Robinson of Indiana spoke for an hour against recognition of Russia; then came the real fireworks with charges of misrepresentation so violent that the whole nation, so to say, cried out—Who is telling the truth?

The President based his veto on four principal objections: First: Under government operation the power plant would lose at least \$2 million annually. The generating and transmission costs would be about 9.1 mills per kilowatt hour wholesale whereas private companies were already selling it at about 7.2 mills. Second: The fertilizer provision was, because of its limitation, "of no genuine importance." Inquiries made by Hoover had indicated that no responsible concern would make a bid. Third: Because of the ineptitude of the federal government "competent management" was impossible. Fourth: The whole concept was utterly wrong. Regulation and not public ownership was the solution. Fifth: The right solution was for Alabama and Tennessee to appoint a commission which, with a member from the farm organizations and one from the Corps of Engineers, would be empowered to lease the plants.

The Veto Is Attacked. For vehemence and tone of contempt the message had few parallels. Those who believed government operation was best did not relish an implication that they were degenerates who had destroyed the original purpose of the project and true Americanism. They charged Hoover with betraying voters who relied on his campaign promise to "make an exception" of Muscle Shoals (Hoover had explained in the message that such exception should be made only in periods of national emergency).

Senator Black, questioning the array of figures used to show the fiscal unsoundness of government power, wanted to know what army engineer had given "the great engineer" his figure of 9.1 mills as the cost of power. He quoted a report made by the Corps of Army Engineers and approved by its chief, General Lytle Brown, to the effect that power could be generated and distributed within a radius of 350 miles at 4.16 mills.

Norris spoke briefly, beginning with a grim, ominous calm that soon deserted him. After describing the potential benefits of his own bill, he closed with: "That is what was in this measure and that is what the President of the United States has taken away from the American people by his wicked, his cruel, his unjust, his unfair, his unmerciful veto."

The Veto Is Defended. Only one Senator—a newcomer, Otis F. Glenn of Illinois, defended Hoover. Glenn began by complimenting

Norris whom "every member of this body honors and respects" although he had used "rather strong and intemperate language" respecting the President. Glenn backed Hoover's power cost figures by inserting in the *Congressional Record* a letter from General Brown to Secretary of War Patrick Hurley. The letter was dated March 2—the day before. It read, "I have checked over the figures in the President's veto message on S. J. Res. 49 and have found them to be correct."

Senator McKellar in his remarks criticized the President for inconsistency on the matter of the government's competition with its citizens. The Farm Board, with Hoover's approval, McKellar said, was doing 15 percent of the cotton business in direct competition with private cotton interests. Senator Smith closed the debate with a reminder that I have emphasized many times myself. Section 124 of the Defense Act of 1916 was a "contract with the American people," he said. It was a contract under which \$150 million was spent on Shoals plants. It provided operation "solely by the government and not in conjunction with . . . private capital." But when the money was spent and the project was ready for operation, the trusts and combines of the country got in their work and the great facilities were idled for years. Smith declared, "We do not know" . . . even "the President does not know" what the power will cost or whether fertilizer can be economically produced as a result of "a plethora of conjectures." So let us find out by experiment. "I do not know that I am committed to Government ownership, but, thank God, I am committed to common honesty."

On a motion to override the veto the vote was 49 to 34, with 13 not voting. Seventeen Republicans, 31 Democrats, and one Farmer Laborite voted to override: 31 Republicans and 3 Democrats voted to sustain. The motion failed for lack of a two-thirds majority. No vote was taken in the House.

The roll call vote of March 4, 1931, climaxed the effort begun in 1919 by Old Guard Republicans to prevent public operation of the Muscle Shoals power system as desired by the bi-partisan Senate, and fertilizer production as desired by the Republican House of Representatives. But the President had his own solution—turning the Shoals over to the states—so the warfare continued.⁷

Reaction To Veto. Comment on the veto was universal and lusty. Two sentences summarize the two sides: It was "a courageous defense of sound basic principles of the relations between government and business." And, "It ignored the public interest and public opinion in favor of private capital as the price of campaign funds and political support." The *Knoxville News-Sentinel*

and other Scripps-Howard papers quoted Senator Norris as saying that President Hoover had allied himself and his party with the power trust against development of the Tennessee Valley for the common good. A few days later Representative Reece retorted in the same papers that the Norris bill was a "dangerous experiment in Sovietism."

A less torrid view was expressed by the Whaley-Eaton Service (March 7, 1931), to which business executives subscribed to get the "low down" on Washington news, that until the new Congress met in December the administration would be particularly active on two major problems—the utilities and trade associations and mergers. The purpose would be to assume the offensive and evolve a "definite utility program on which he [Mr. Hoover] would stand for reelection."

The President's Solution. The President's plan to end the controversy by turning Muscle Shoals over to the states was at once recognized as a political maneuver in his campaign for reelection. Hoover had lost the Senate on all counts. But the House still rated fertilizer above power. So if Alabama and Tennessee teamed up with him and the Senate again refused he could appeal to the nation to support his plan during the campaign. The plan was designed to please the power trust, agriculture, and the great body of states' righters. Transfer of complete control of the project to the two states had been emphasized by the concluding words in his veto: "They can lease as their wisdom dictates and for the industries that they deem best in their own interest. It would get a war relic out of politics and into the realm of service."

The Muscle Shoals Commission. The Tennessee legislature, acting promptly and with no opposition of consequence, set up a commission to work with Hoover, March 23, 1931. Governor Henry Horton appointed three members to represent the state. The legislature of Alabama was less cooperative. Its approval was not secured until June 30 because of a statewide revolt headed by the Tri-Cities Chamber of Commerce of Sheffield, Florence, and Tuscumbia, three cities near Wilson Dam. Their move was supported by many municipalities and business interests and, surprisingly, by many Farm Bureau Federation men who rejected the leadership of their national president, Edward A. O'Neal, who had consistently opposed the Norris bills.

After a bitter encounter the commission bill passed the state legislature, and Governor B. M. Miller appointed Alabama's three members.

Writing at the time, Judge Allen J. Roulhac, of Sheffield, stated for the benefit of the people of other states: "The people of Alabama who are informed on this subject know that the resolution for a Muscle Shoals Commission originated with and was supported by the Alabama

Power Company and their attorneys and lobbyists." And J. G. Baker, secretary of the Sheffield-Muscle Shoals Chamber of Commerce, wrote: "You cannot imagine, unless you were in the district for a time, what our people have been subjected to in the way of coercion and trickery at the hands of the power gang."

The Alabama Power Company was buying Wilson Dam power for two mills per kilowatt hour and retailing it to domestic consumers in Florence at ten cents. Significantly, the resolution adopted by the state contained a clause forbidding the new commission to approve a lease for the operation of the Muscle Shoals properties except "by a private corporation or an individual." Congressman O. B. Lovette, who had defeated Reece for reelection, said in an address at Florence on June 11, 1930 "I would rather see Muscle Shoals rot and rust than be placed in the hands of a power trust which would manacle our children forever."

A Who's Who of the Commission. Governor Miller of Alabama appointed to represent his state on the commission County Judge S. F. Hobbs of Selma, who became chairman. Judge Hobbs had been campaign manager for the Governor, who was backed by the Alabama Power Company.

Governor Horton's most influential choice was Mercer Reynolds, president of the Chattanooga Oil Company, ex-president of that city's Chamber of Commerce, and ex-president of the Tennessee River Association. Reynolds had labored in opposition to the Norris bills with Claudius H. Huston. For many years head of the association, Huston was made chairman of the Republican National Committee by Hoover.

Another appointee, however, was W. F. McFarland, a former city official of Florence, who apparently did more hard work and spent more time than any of the six members from the states.

The President Cooperates. Edward A. O'Neal, president of the American Farm Bureau Federation, was the most prominent appointee of the President on the commission. He had long opposed public power and worked in behalf of the Cyanamid Company proposal. On December 19, 1930, O'Neal had secured passage of a resolution by the federation authorizing their board of directors to lease and operate the Muscle Shoals project for fertilizer manufacture, and to sell surplus power "so as to benefit agriculture and preserve the public interest."

Hoover also appointed Lieutenant Colonel Joseph I. McMullen, army attorney, and Colonel Harley B. Ferguson, of the Corps of Engineers, as members. In addition, Lieutenant Colonel Max C. Tyler was technical adviser; Major George P. Hill, legal adviser, and Captain

Thomas H. Green, secretary. The latter two were from Colonel McMullen's office.

As a working task force, Hoover had five Army men on the commission—not two as his message had suggested. The President's six balanced the six members from the two states. The National Grange and the National Farmers Union, both of which were opposed to the President's policies, were not asked to represent agriculture.

Puzzled Congress. Hoover sent the Muscle Shoals Commission's report to Congress on December 17, 1931, with no comment. The report was a handsome, richly illustrated quarto of 120 pages. Three were devoted to "unanimous" conclusions and recommendations, followed by a highly technical 32-page survey of the fertilizer industry by Dr. P. E. Howard, a government chemist. Lieutenant Colonel M. C. Tyler presented a 33-page report on the cost to the federal government of transmitting and selling Muscle Shoals power and similar matters.

At first glance most readers in Congress and out were highly amused. But after that, eyebrows were raised. The President, follower of Alexander Hamilton, had turned states righter and offered Alabama and Tennessee a free gift of Muscle Shoals to dispose of "as their wisdom dictates." But legislatures and Governors had rejected the offer with the recommendation that Congress authorize the President to lease the properties.

The commission found quantity production of certain types of commercial fertilizer "economically feasible," but laid down safeguards nearly as objectionable as those in the bill the President rejected.

The power plants should be leased. No transmission lines should be built. Yet the government should build Cove Creek Dam as soon as leases were made for the other dams. How this \$87 million project could be built without further appropriations, as proudly announced, was not explained. Dr. Howard's article did not support the fertilizer recommendation. Colonel Tyler was against construction of Cove Creek Dam until some years later when justified by market demands. If the government attempted to operate the plants, it would lose \$39.6 million in 15 years, he estimated.

Climax and Anti-Climax. Nearly two weeks later, on January 5, 1932, a critical and politically alert House Military Affairs Committee, now under Democratic control, began consideration of the report. Chairman Quin presided at two sessions but was taken ill and died on February 4, 1932. His successor, John McSwain, appointed W. Frank

James, Republican, to preside over the remaining ten hearings, which were extensive.

The committee was intent on discovering how much "local" and how much administration "wisdom" had gone into shaping the report. Beginning with Chairman Hobbs, each member of the commission was questioned about the source of the report and its contents. It was established that a half-dozen one-day public meetings had been held over the region; that none of the information gathered had been included; that in the four months between appointment and report the chairman and most of the commissioners had spent only ten days on the assignment. All the other legal, power, and chemical data had been supplied by the War and Agriculture Departments except for information received from Charles J. Brand, secretary of the American Fertilizer Association. The commission's office was a room in the War Department with Captain Thomas H. Green, as its secretary, working under the direction of McMullen and Ferguson. They had prepared the report, paid for out of the President's contingent fund.

It was admitted that although the document had been heralded and signed as a unanimous report, Hoover's men had not agreed that quantity production of fertilizer should be attempted, and the Army Engineers were against early construction of Cove Creek Dam, although both were recommended. To the astonishment of the congressmen and the country, members from the two states asserted responsibility for only three pages of the report following the headlines "Conclusions" and "Recommendations" as their own.

Commenting on the report's value after so much fanfare, time, and expense, Vice Chairman McSwain said to Hobbs: "Now Judge, your report has not in my humble judgment added one syllable of additional information to the thought or to the solution of the Muscle Shoals problem that has not been before us all these years." There was no dissent.

At the close of the testimony, President O'Neal of the Farm Bureau Federation expressed his happiness that the report he had signed "is a unanimous one." Under sharp questioning, he admitted that the statement by Army men contradicted the recommendations—"A lot of the facts in these statements are true, and a lot I don't think are true." He had differed on important matters in respect to both fertilizer and power, but he had said "in order to keep harmony, let her go in." He had urged the inclusion of matters of his own choosing, but none of it was printed. Pressed to state the specific minimum and maximum quantity requirements he would insert in a lease for making fertilizer

and the disposition of power he exclaimed, "You have to trust somebody besides God." So turn it over to a board, and "safeguard it in that way." Representative McSwain said that "the red book [the report had red covers] looks to me like a red herring trail." O'Neal made no denial.

Orders Obeyed. All three of the President's appointees testified that the report did not reflect their independent opinions. The Army members testified that they had delivered what was expected of them. They said there was fear that the present Congress might pass the Norris bill for the third time. Then Congressman McSwain asked: "Isn't this the truth: that being the major premise, to wit, the effort to pass the Norris bill, that all this study of Colonel Tyler was to get some dope to help head it off?" Colonel Ferguson replied: "That is what we were doing." The colonel was of the opinion that "Muscle Shoals is a power proposition. You can't escape that." Regarding fertilizer: "Anybody that wants to can keep on being in favor of nitrates. He is wasting his life." Colonel McMullen, the lawyer, was just as frank. At the outset he assured the Congressmen, "I am an Army officer . . . I don't generally offer my personal opinions unless I am asked for them." So a report was prepared which "reflected the enunciations in the President's veto message."

Colonel Tyler's answers to questions brought added confusion as to who did what and why. General Lytle Brown had said that he detailed Colonel Tyler to serve with the commission because of the fine work he had done in preparing estimates for the President's veto message. He had great confidence in the colonel. But the colonel promptly denied that he alone supplied the figures. The statement was the work of three or four people, including Engineers Pillsbury and Drew as well as himself. It was a hurry-up job, accomplished in the hours between afternoon and midnight on one day. The Committee thereafter paid little attention to the President's claim of 9.1 mills per kilowatt hour as the cost of delivered power with huge losses sure to be suffered through government operation. They considered it evident that the engineers had handed Hoover the kind of estimates they knew he wanted.

Since the Army had for years advised construction of Cove Creek dam to double the power output of Wilson Dam and regulate the river for flood control and navigation, the committee questioned the colonel and Chief Engineer Lytle Brown about that dam. Brown replied, "The view of my office is that it is the function of the federal government to furnish the navigation and cooperate with private interests

wherever it is economically feasible to get the power." Cove Creek was "primarily a power proposition" and should be left to the power companies. Brown also insisted it was not the business of the government to provide either flood control or power. "I don't think it is any business of the federal government to provide local control of waters," he said. The Army Engineer chief pleaded inability to give the committee any data on comparative advantages of federal or private construction of Cove Creek or other dams although he represented the government's experts on dams.

The House Passes Its Own Bill. These prolonged hearings were part of the backstage maneuverings in the conflict between the President and Congress on the Muscle Shoals problem. Hoover had made no comment on the report when forwarding it to Congress. He never did publicly express his disappointment that the states had not only rejected his proposal that they take over and lease the project but that they also rejected the Reece proposal empowering him to negotiate leases without any supervision by Congress.

Having disposed of the President's federal-state commission, the House committee appointed a subcommittee, with Representative Lister Hill as chairman, to draft a bill in line with its previous measures, but making important concessions in a desperate effort to get going. A Muscle Shoals Board was set up to be appointed by the President subject to approval by the Senate. But any lease of the fertilizer plants which the board might make was subject only to his approval. It was not to be sent to Congress.

The old "market demand" provision reappeared. If a lessee did not sell its full production, it could suspend manufacture until the surplus was disposed of, provided that fertilizer containing 2,500 tons of nitrates is kept in storage. Profits of eight percent were allowed, by-product chemical production was permitted. If no satisfactory fertilizer leases could be made and the government was forced to operate the plant, the board could even negotiate leases at a later date if that proved advisable. The board would operate the power plants and supply low-cost power for fertilizer and chemical production. Any surplus power was required to be sold "at the switchboard" with preference to public bodies. This meant no transmission lines, perhaps the greatest concession of all.

There the yielding ended. If Hoover found himself unable to persuade private capital to make fertilizer under these generous terms in 18 months, then the government would automatically proceed to develop the whole project. Representative Hill introduced the com-

mittee bill, House Resolution 11051. The Rules Committee gave it the right-of-way. It was discussed for two hours on May 4 and 5, and then passed. Representatives Ransley and Stafford led the Republican attack on Socialism and Moscow. McSwain and Hill officered the Democratic defense. The old shibboleths were repeated.

The roll call vote shows that on Ransley's motion to recommit the bill and kill it, 129 Republicans and 21 Democrats voted Yes. But 157 Democrats and 42 Republicans and one Farmer-Laborite voted No. Thirty-nine Republicans and thirty-seven Democrats did not vote. The bill then passed on division by 183 to 132 and was sent to the Senate where it died with this Congress.

CHAPTER XXII

THE PRESIDENTIAL CAMPAIGN OF 1932

Throughout the Hoover administration the great depression steadily deepened. The collapse of our entire financial and economic system was threatened, and everybody from ditch digger to capitalist was suffering from it. Hence, by March 1932, with the presidential election in the offing, the role that the federal government should play in meeting the emergency became the paramount issue.

Conservative writers have never credited the Muscle Shoals problem with the part it played during the campaign and afterward. Yet, it was important because Muscle Shoals symbolized the struggle between the general welfare and private capital for priority from government. The Tennessee River was already supplying a national yardstick—one by which candidates were measured.

The decision on Muscle Shoals would set precedents on regulation and utilization of water resources and on regional planning which far exceeded the importance of precedents established by the Boulder Dam Act.

Two Congresses had decided that the federal government should remain in control of the Muscle Shoals project and operate its power facilities. Two Presidents, Coolidge and Hoover, had vetoed this solution. If the Republicans won the election, it appeared certain that Hoover's policies would wreck efficient regulation of utilities and end public waterpower development. The conflict could not be continued much longer. Thirty years of conservation effort would be gravely impaired, if not entirely lost.

If the Democrats won, what would happen? Would the old bi-partisan coalition be strong enough to lease the entire project or defeat any effective plan of government operation? The performances of the House under Democratic control after the 1930 election gave little hope that the party could shake off power trust influence and meet the requirements of 20th century statesmanship.

Thus far the House had insisted on sale of any surplus power at the busbar right beside the generator, assumedly to private power companies. States and municipalities were to be given first right to buy the power but few had, or could afford, transmission lines to pick it up at some far-off dam. The Senate insisted that the government build

the transmission lines and market its power wholesale at city gates.

From the viewpoint of conservationists and liberals during those critical months one hope remained—the election of a president with intelligence and courage to meet the crisis without compromise on essentials. The Senate had stood pat on certain fundamentals. The utilities and their corporate allies had done likewise. The power company allies included the national organizations representing banking, insurance, mining, manufacturing, and other business interests. They even included the National Association of Railroad and Utilities Commissioners, composed of the public officials who were supposed to regulate the companies. A majority of the members of the engineering and legal professions supported their utility clients (or hoped-for clients). The educational world was silent except for a few outstanding individuals.

Power And Politics. The Federal Trade Commission was not allowed to investigate the political activities or money spent by the utilities. That would have been too much to expect since men in both the old parties were involved. There was a great need for more daylight on what to expect from the candidates, especially the presidential candidates.

Mr. Hoover's attitude was now known and his renomination assured, but what about the Democrats? On March 18, 1932, I issued, a 47-page National Popular Government League bulletin, entitled, "The Power Records of the Presidential Candidates; a Nonpartisan Analysis for the Information of Voters." It was issued before the national conventions and before the party candidates were finally named.

The bulletin received coast-to-coast newspaper coverage because of an introductory statement signed by 15 Senators and 22 House members, about equally divided between the parties. Their statement read:

"We regard the power question in its economic, financial, industrial and social aspects as one of the most important issues before the American people in this campaign of 1932.

"Its political significance cannot be over estimated and must challenge the attention of those interested in any progressive movement or measure. The reason is plain. The combined utility and banking interests, headed by the power trust, have the most powerful and widely organized political machine ever known in our history. This machine cooperates with other reactionary economic, industrial, and financial groups. It is strenuously working to control the nomination

of candidates for the Presidency and the Congress of both dominant political parties."

The statement was signed by the following senators: *Republicans*—Brookhart (Iowa), Cutting (New Mexico), Frazier (North Dakota), Howell (Nebraska), Johnson (California), Norris (Nebraska), and Nye (North Dakota). *Democrats*—Costigan (Colorado), Dill (Washington), Gore (Oklahoma), Long (Louisiana), McKellar (Tennessee), Walsh (Montana), and Wheeler (Montana). *Farmer-Labor*—Shipstead (Minnesota). Among members of the House signing were: *Republicans*—Amlie (Wisconsin), Horr (Washington), La Guardia (New York), and Sinclair (North Dakota). *Democrats*—Cannon (Missouri), Evans (Montana), Howard (Nebraska), Rainey (Illinois), and Thomason (Texas). Others who signed were: John A. Simpson, president, National Farmers Union, and Judge George W. Woodruff, Interior Department solicitor during the Roosevelt administration.

The bulletin attempted to reveal where each candidate, if elected, would stand on three major issues: public or private operation of the Muscle Shoals project; enforcement of the Federal Water Power Act and federal regulation of interstate power corporations; and the character of appointments each would make to administrative offices. More attention was paid to what the candidates had done as public officials rather than what they had said, to determine whether they would act in the public or private interest. Deductions from the documented evidence were summarized in the bulletin as follows:

	<i>Disposition of Muscle Shoals</i>	<i>Regulation of utilities</i>	<i>Appointment of administrators</i>
<i>Republican</i>			
Hoover	Private	Private	Private
<i>Democrat</i>			
Governor Franklin Delano Roosevelt	Public	Public	Public
John N. Garner, House Speaker	Public	Unknown	Unknown
Newton D. Baker, Ex-Secretary of War	Private	Private	Private
Albert C. Ritchie, Maryland Governor	Private	Private	Private

Newton D. Baker had built Cleveland's famous municipal power plant when he was mayor of that city. As Secretary of War and in testimony before congressional committees, he favored government ownership. He was nationally regarded as a great liberal, but the

public was unaware that he had been attorney for the Electric Bond and Share Company in the New River case which was instituted to have the Federal Water Power Act declared unconstitutional, an act Baker had helped draft; and also, that he was the utilities' dark-horse candidate for the presidency. I discussed this unusual situation with U. S. Senator Edward P. Costigan over his dining room table we wrote this sentence for the bulletin: "How can he do this today as a lawyer and tomorrow defend the public interest as President, when as both lawyer and President he takes an oath to uphold the Constitution of the United States? It is for Mr. Baker to explain."

The bulletin gave notice that progressive leaders intended to make power a prime campaign issue. The bulletin was mailed to all delegates to the Democratic convention at their home addresses before the meeting. Among other things, it alerted the delegates to the activities of Secretary Baker and Alfred E. Smith regarding utility problems.

The Utilities Are Bipartisan. The warning by members of Congress that the power trust was "strenuously working to control the nomination of candidates for the Presidency and the Congress of both dominant political parties" was based on known activities in their respective high commands.

The Republican National Committee, since Theodore Roosevelt left the White House, had been in sympathy with the power trust. Repeated Republican efforts to "get rid of Muscle Shoals," always to private companies, made that party's position clear. It was preparing to run Hoover again.

A serious conflict had developed among Democratic leaders. Al Smith, as governor of New York and candidate for the Presidency in 1928, advocated state ownership and operation of the power plant to be built on the St. Lawrence River. He proposed to sell the power wholesale to private companies at the switchboard and fix the retail rates in the contract. This policy had the support of the governor's friend, Owen D. Young, a Democrat and chairman of the board of General Electric Company.

Immediately after his nomination, Smith had appointed his friend, John J. Raskob, as chairman of the Democratic National Committee. Raskob, formerly a Republican, was a millionaire capitalist, director in several banking and industrial concerns and later connected with the Du Ponts. He resigned as chairman of the finance committee of General Motors on accepting the Democratic chairmanship. In 1930 he was a director of the corporation that constructed the famous Empire State Building in New York City. Al Smith was president

of the corporation. It was noticeable that after battling the power trust for ten years Smith became silent on the power issue and Raskob equally so.

In a press release one week before the Democratic convention in 1932 I wrote: "For the past four years under the guidance of Mr. Raskob the Democratic headquarters in Washington with its much lauded press bureau under the direction of Charles Michelson has been profoundly silent on every phase of the power question. They have given no publicity to the startling revelations of the investigation of power by the Federal Trade Commission. They have taken no stand on any of the important power bills before Congress herein mentioned. They have said nothing about the attempted destruction of the Federal Water Power Act. In short, they appear to have been as much annoyed by the warfare against the power trust as Hoover himself and the Republican National Committee. On the other hand, a vast majority of the rank and file of the Democratic Party is progressive. It has real leadership in the liberal bloc of Senators, Congressmen and many State leaders of the nation. The fateful question is what leadership will the 1,155 delegates at Chicago select?"

The Democratic National Committee met in Washington in March. Smith, titular head of the party and again candidate for the presidency, attended. Questioned by newsmen, he minimized the power question as a secondary issue, saying it was too complicated for the people to understand. National leaders at once interpreted this remark as a retreat and concluded that Al had gone reactionary. He tried to deny this impression in a press release dated April 3: "I hope that the Democratic convention will declare in its party platform in no uncertain terms for government ownership, control and operation of electrical energy developed from falling water to be exercised at the site." The three words "at the site" are revealing because that policy was exactly what the utilities were demanding at Muscle Shoals and elsewhere—no government transmission lines.

Governor Roosevelt and Divided Counsels. Franklin D. Roosevelt became governor of New York on January 1, 1929. Like Senator Norris, Roosevelt had strong personal convictions that the cheapest possible electrical supply for all the the American people was a matter of utmost social and economic importance. He was confronted with a sharp division within his own state as well as nationally. The parallels are striking. If the genesis of the New Deal is to be found in Roosevelt's experience as governor, as he afterwards stated, it was doubly true of his power policy. Roosevelt had inherited from Governor Smith

the policy of marketing St. Lawrence power to private concerns at the switchboard and had endorsed the idea in the 1928 campaign. He was aware of its dangers, however, and his tactic in meeting the dilemma was a masterpiece of political strategy.

The utilities were assuring the public that they were making a profit of only six to eight percent. Taking them at their word Roosevelt sent a message to the legislature on March 12, 1929, in which he said the state would sell the utilities the power, fixing rates in the contract to enable them to earn eight percent profit on the actual cost of their transmission and local distribution systems. Here was their chance to serve the public. But Roosevelt's proposed elimination of "water" in valuations was as objectionable to the utilities as public ownership itself, and the public caught the point.

For two years New York was in political turmoil over the issue until on April 4, 1931, a bill was passed authorizing state development of the project but without the right to build transmission lines. Roosevelt appointed Attorney Frank P. Walsh, a well-known progressive, as chairman of the State Power Authority and the fight continued. No construction was possible during Roosevelt's term because of the United States Senate's refusal to approve a treaty Hoover had negotiated with Canada.

For Efficient Regulation. Governor Roosevelt frequently and publicly expressed his belief that consumers were not protected by the State Public Service Commission. On March 25, 1929, at his request, the legislature set up a six-member commission to survey the workings of the public service group. Republican leader John Knight was chairman. Roosevelt was permitted to name three members; he chose Frank P. Walsh, James C. Bonbright, of Columbia University, and David C. Addie, a social welfare worker.

Ten months later, after an exhaustive inquiry, there came a unanimous report that regulation had broken down, chiefly because the method of arriving at "valuation" as a rate base was wrong. Roosevelt's men recommended that the "prudent investment" principle be made obligatory and that municipalities be given the right to construct or acquire their own systems without permission of the legislature. With this Knight and his appointees did not agree. The few minor acts passed were of so little import that on March 2, 1932, Roosevelt in a message to the legislature reviewed the three years of effort and charged that \$100,000 had been spent on the survey, but "it has as yet produced no legislative action for the benefit of the people of the

state." Shortly thereafter President Hoover appointed Senator John Knight as a District Federal Judge.

An Historic Friendship Is Broken. Al Smith and Franklin D. Roosevelt had been personal friends and political teammates since 1912, when both were members of the New York legislature. At the Democratic conventions of 1924 and 1928 Franklin made speeches nominating Al for the presidency, naming him the "Happy Warrior." On Al's insistence, Franklin left his retreat at Warm Springs, Georgia, where he was desperately trying to recover from the crippling effects of poliomyelitis and to walk without crutches. Reluctantly, he accepted the nomination for the New York governorship.

After Smith's defeat and Roosevelt's election it appears that the older man felt he should be political godfather to his younger associate, but Roosevelt stubbornly insisted on being free of a monitor. One potent cause of the evident rupture was a clash over disposition of St. Lawrence power. Smith had compromised on sale of power at the switchboard and its transmission over private lines. Roosevelt had not. Their whole cleavage over power was to make its appearance in Chicago at the Democratic National Convention.

The Republican National Convention. The Republican convention came first. It was held at Chicago June 14-17 and ran true to form. Its main concern was to give color to the Hoover administration as soundly progressive and impress voters with the sacredness of party regularity.

To that end, the manager selected to insure the President's renomination was his Postmaster General, Walter F. Brown of Ohio. Brown had been attorney for the Toledo Railway, Light, and Power Company, political boss of Toledo and regional right arm of the famous "Boss Cox" of Cincinnati, head of the Republican state machine. In 1912, however, Brown joined up with Theodore Roosevelt as a Bull Moose progressive, a reputation now of political value. Hoover won easily although there was some feeble opposition.

Equally important was the allegiance of James R. Garfield, son of the former President and Secretary of the Interior in Theodore Roosevelt's cabinet. As secretary he had been a vigorous supporter of TR's conservation policies. Since his retirement he had become a practicing attorney in Cleveland. The public still regarded him as a conservationist and friend of Gifford Pinchot. Therefore, Garfield's selection as chairman of the platform committee was ideal for campaign purposes. Time and party loyalty had mellowed Garfield. The President knew his policies were safe in Garfield's hands. As chairman of

Hoover's committee on conservation and administration of the public domain, Garfield had recommended that 178.9 million acres be handed over to the states with all their vast forests, minerals, oil and grazing resources. The report had contained, however, a specific exception that reservoir sites for irrigation projects should remain under federal ownership and control. It further suggested that it was desirable to adopt "a definite policy relative to hydroelectric development," but the issue of whether by the government or private enterprise was discreetly sidestepped. Chairman Garfield's platform planks in this respect were likewise discreet:

"Conservation. The wise use of all natural resources freed from monopolistic control is a Republican policy, initiated by Theodore Roosevelt. The Roosevelt, Coolidge and Hoover Reclamation projects bear witness to the continuation of that policy. Forestry and all other conservation activities have been supported and enlarged.

"Public Utilities. . . . As proof of the progress made by the Republican Party in government control of public utilities, we cite the reorganization under the administration of the Federal Power Commission with authority to administer the Federal Water Power Act. We urge legislation to authorize this commission to regulate the charges for electric current when transmitted across state lines."

After Garfield read these planks in a nationwide radio broadcast, the Republican hosts went forth to battle under the conservation banner of Theodore Roosevelt. An observant public noted that Gifford Pinchot, father of the conservation movement, did not attend the convention and, like other outstanding conservationists, he did not support Hoover's campaign.

The Democratic Convention. Meeting in Chicago, June 27, 1932, the Democratic convention began a six-day battle that narrowly escaped a repetition of the fiasco of 1924 in New York, when the struggle between McAdoo and Smith went to 103 ballots.

I attended the Chicago convention and was in contact with delegates for the entire week. The utilities and their allies tried to nominate their own candidate while the nation was being entertained by news of accustomed maneuvering and the hectic conflict over the prohibition plank, won by the "Wets."

The Roosevelt forces were in a modest majority and organized the convention, electing Senator Alben W. Barkley of Kentucky as temporary chairman and Senator Thomas J. Walsh as permanent chairman. But they did not have the two-thirds majority necessary to nominate their candidate. Next in voting strength came former Governor Smith,

followed by Speaker of the House Garner. Governors Byrd of Virginia, Ritchie of Maryland, George White of Ohio, and Murray of Oklahoma were favorite sons, who received almost no support outside their state delegations.

There were an unusual number of fights within state delegations. Inquiring the reason, I was frequently told: "why the utilities, of course," or "this power trust gang." Many delegates were beholden to their power companies back home, even members of some of the Roosevelt delegations.

Presently I was informed that a former secretary of Newton D. Baker was quartered in a room in the Congress Hotel interviewing delegates and urging their support of the former Secretary of War when his name was placed in nomination. Being acquainted with the gentleman, I called on him at the mysterious room and found the information correct. The modest Newton D. Baker was an active dark-horse candidate.

A Deadlock Threatens. The strategy now became clear. Roosevelt had a safe majority but not the needed two-thirds to win the nomination. Governor Smith could not win. The opposition could defeat Roosevelt if it held together and continued balloting until an exhausted convention turned either to a "favorite son" or, preferably, to a dark-horse candidate who had not aroused factional and personal hatreds.

Balloting did not begin until 9 o'clock on Thursday night, June 30. For four days and nights the delegates had labored under high tension in distressingly hot and humid weather. Tactics of delay were employed to slow up the voting so that after an all night session, which lasted until 9:15 Friday morning, only three ballots had been taken, with all delegates standing pat. A prolonged deadlock seemed inevitable.

At this juncture the prime coup of the utilities was launched. A deluge of telegrams from every state in the union rained upon the delegates, urging the nomination of Newton D. Baker, proclaiming him the master statesman who could restore party harmony and win the election.

Willis J. Spaulding, of Springfield, Illinois, presented me with a telegram he received from Port Washington, New York. It read: "Baker for president clubs in colleges and universities urge nomination of Baker, powerful Democrat, widely trusted national leader. Signed: Central Committee of Colleges."

The name of the sender was not given. Inquiry failed to uncover any such committee. Many messages were of like obscurity, but the

majority were properly signed and disclosed utilities as the prime movers of the broadside campaign.

Instead of stampeding the convention the effort backfired. Several delegates laughingly made comments to me, as: "That telegram stunt must have cost the power trust a lot of money." Nevertheless, its occurrence demonstrated the existence of a pro-utility minority among Democrats.

The Deadlock Is Broken. The "Stop Roosevelt" scheme collapsed at 9 o'clock Friday night when the convention reassembled for its fourth ballot. When California was called, William G. McAdoo took the platform amid a tumultuous uproar of cheers and boos. He stated that "to bring this contest to a swift end and, we hope, satisfactory conclusion" his state would now transfer its vote from Garner to Roosevelt. He added that Garner had told his Texas delegates to follow suit. Five votes more than the required two-thirds had been transferred. It was a tiny margin in a convention of 1152 votes, but it was conclusive.

The contest was over. The effect was electric. Everybody knew that Roosevelt had won. As state after state came over, the New York governor was nominated. This was a pivotal moment in American history.

The victory was not easily won. A liberal eastern delegate of uncanny insight and knowledge told me as we left for home: "We will never know how close the Wall Street bunch came to deadlocking the convention and putting over its candidate [meaning Baker]. It makes me shiver to think of it. Every possible inside pressure was brought to bear."

The "New Deal" Acceptance Speech. Instead of going through the usual pompous formalities, Roosevelt boarded an airplane for Chicago while the convention waited for his appearance. This break with tradition astonished the Nation and centered attention on his speech, which concluded with the historic words "I pledge you, I pledge myself, to a *new deal* for the American people."

Public power people were disappointed that the only reference to their issue was praise for the platform plank "calling for the letting in the light of day on the issues of securities." But perhaps it was a good tactic to avoid sore spots in an effort to restore party harmony and create an efficient fighting force.

The Platform. The Democratic platform was the shortest of record. The power planks read: "We advocate the conservation, development, and use of the Nation's water power in the public interest. . . . The

removal of Government from all fields of private enterprise except where necessary to develop public works and natural resources in the common interest . . . Regulation to the full extent of federal power, of (a) holding companies which sell securities in interstate commerce; (b) rates of utility companies operating across state lines; (c) exchanges in securities and commodities."

Mention of Muscle Shoals, hot in the public mind and mentioned in former pronouncements, was conspicuous by its absence.

At the request of Senator Clarence C. Dill, I addressed the Resolutions Committee on the power question and was the only one to do so. I emphasized that the battle for public ownership and operation of the Shoals project was over; that the real issue at stake was whether ultimate consumers would get the benefit of power from federal dams, notably on the Tennessee River, and that the issue turned upon federal operation and the right to build transmission lines to market its power, with public bodies preferred. The talk was received in silence and promptly forgotten. No questions were asked.

The power planks were, of course, typical platform generalities. The chances of establishing an efficient, clean-cut superpower system on the Tennessee or elsewhere which would deliver actual low cost power, as Ontario had done, depended on Roosevelt. Doubtless he would support comprehensive valley development but would he insist on the right of the government to market its own power over its own transmission lines? That was one basic question among others bothering advocates of public power, including Senator Norris, as the campaign swung into high gear.

Roosevelt's Portland Speech. Following his acceptance speech, Franklin Delano Roosevelt delivered 20 major addresses in various sections of the country, each dealing with a separate problem. He got to "public utilities" at Portland, Oregon, on September 21. After pointing out that for 300 years English and American law had held utilities to be licensed agents of government and not competitive private business, as utility propaganda would have it, he reviewed the history of the electric industry and then came directly to Muscle Shoals and public power:

"State owned or federal owned power sites can and should and must properly be developed by government itself. . . . When so developed by government, private capital should, I believe, be given the first opportunity to transmit and distribute the power on the basis of the best service and lowest rates to give a reasonable profit only. The right of the federal government and state governments to go further

and to transmit and distribute where reasonable and good service is refused by private capital, gives to government—in other words, the people—that very same essential ‘birch rod’ in the cupboard.”

After mentioning Boulder Dam and repeated vetoes of Muscle Shoals bills, Roosevelt pledged Columbia River development. He indicted Hoover for failure to regulate utilities, including their financial operations, and charged that Republicans were “dominated by private rather than public interest.”

He continued:

“My distinguished opponent is against giving the federal government in any case the right to operate its own power business. I favor giving the people this right where and when it is essential to protect them against inefficient service or exorbitant charges. . . .

“I promise you this: Never shall the federal government part with its sovereignty or with its control over the power resources, while I am President of the United States.”¹

Hoover At Madison Square Garden. Once he had made his acceptance speech, August 11, candidate Hoover chose to remain silent on the utility issue until a week before the election. On Monday night, October 31, he referred to it briefly, along with many other issues in a major address at Madison Square Garden, New York City. With commendable candor he came quickly to the power question, the matter uppermost in the public mind.

“I have stated unceasingly that I am opposed to the federal government going into the power business. I have insisted upon rigid regulation. The Democratic candidate has declared that under the same conditions which may make local action of this character desirable, he is prepared to put the federal government into the power business. He is being actively supported by a score of Senators in this campaign, many of whose expenses are being paid by the Democratic National Committee, who are pledged to federal government development and operation of electrical power.

“I find in the instructions of campaign speakers issued by the Democratic National Committee that they are instructed to criticize my action in the veto of the bill which would have put the government permanently into the operation of power at Muscle Shoals with a capital from the federal Treasury of over \$100,000,000 . . . In that veto I stated that I was firmly opposed to the federal government entering into any business the major part of which is in competition with our citizens.”

Hoover read an extended excerpt from the veto message and ended

with the charge that the Norris proposal was degradation not liberalism.

Clarifying the Issue. Roosevelt was a lawyer whose reputation rested on his ability as a politician. Hoover's reputation had been built on his occupation as an engineer and his public service career. Many intelligent citizens were confused. Might not the engineer be right on the technical side? Whither were we drifting? Were not army engineers and distinguished scholars supporting Hoover?

The bulletin I had issued in March carried a prefatory statement on the significance of the power question, signed by 37 members of Congress. But they were also politicians. With this suspicious attitude of the voters in mind, I published on September 9 an extended bulletin on the power records of Hoover and Roosevelt. It was prefaced by a statement that is of interest here since it reflects the attitude of the progressive scholarship of the era which had the courage to speak out. Thirty-seven outstanding authorities in the field of economics, the political and social sciences, engineering and labor relations signed the statement, which read:

The Crux of the Power Question. "The power issue, squarely met, means an abundant supply of cheaper current for industries and business houses, large and small;

"Substantial reduction in rates and increased use in homes now serviced, the extension of electric service to millions of farms, town and city homes not yet supplied;

"Reduction in cost of municipal street lighting, pumping, etc., thereby relieving the tax burden;

"Preservation and planned use of the nation's water power resources, coordinated with flood control, navigation and irrigation.

"This is an issue of enlightened civilization against primitive living.

"We now know regulation as practiced is not enough. It permits unsound inflation and high rates and leaves the country confronted by a virtual monopoly too powerful for commissions to control.

"There are two courses open to us:

"1. We may drift in the channels cut for us by interested promoters of private utility companies, whose methods are well known;

2. We may adopt a program of positive action, which means the stiffening of regulation on the basis of prudent investment and fair return; and the extension of public competition, demonstrably the most effective regulatory force yet devised.

"We are at the parting of the ways. The issue is nonpartisan and

all candidates for President and Congress must make clear where they stand."

Among the signers of this statement were Charles A. Beard, political scientist and historian; George S. Counts, professor of education, Columbia University; John R. Commons, professor of economics, University of Wisconsin; Arthur Powell Davis, former director and chief engineer, United States Reclamation Service; Felix Frankfurter, then a professor at Harvard University; Frank A. Fetter, professor of economics, Princeton University; M. H. Hedges, research director, International Brotherhood of Electrical Workers; Judge Francis J. Heney, of the Los Angeles superior court; Dr. William E. Mosher, director, Syracuse University School of Citizenship and Public Affairs; E. A. Ross, professor of sociology, University of Wisconsin; Dr. John A. Ryan, industrial ethics, Catholic University of America; E. M. Scofield, consulting engineer, Los Angeles.

The Governor Is Specific. The bulletin set up ten test questions to which the answers, derived from the records of the candidates, would indicate their probable performance in office.

President Hoover's record was clear save on one point; answer to a letter of inquiry was politely declined by one of his secretaries on the ground that he was too preoccupied with other matters.

As to Governor Roosevelt, my information was incomplete on some critical points; besides the air was full of charges that he was a clever politician who could not be depended on to "stay put." I sought an interview in the hope that I might judge for myself whether public power and conservation were matters of real personal conviction with him, for which he would fight to the bitter end without disastrous compromises or, on the other hand, whether they were merely popular campaign issues on which to get elected.

Senator Norris had announced his support because he was certain Roosevelt would sign his Muscle Shoals bill.

An interview with Roosevelt was arranged by my friend Marvin H. McIntyre, one of his aides. I was invited to lunch on a hot forenoon in early August. Afterward, we discussed power for two hours in Roosevelt's workroom at Hyde Park. I queried in substance: "You have put teeth into Al Smith's contract plan for private transmission and distribution and you have said it would yield cheap power. But you have never said how cheap. I figure it could be sold at 3 cents per kilowatt hour to homes and farms and propose to say so in this bulletin. How about it?"

I shall never forget the comeback to that challenging question. The

famous Roosevelt smile disappeared. Blue eyes flashed. Leaning forward with finger pointing, Roosevelt exclaimed with tremendous force: "Yes! And progressive reductions thereafter!"

It was my turn to smile. No slippery politician could have simulated the sincerity of that direct, swift response right in the middle of a campaign at a time when average domestic private rates exceeded 7 cents. A typical trickster would have equivocated and suggested we wait on further research. Roosevelt knew it was the governing sore spot in the whole controversy and did not flinch.

The rejoinder convinced me that Muscle Shoals would be in safe hands and that the Roosevelt supporters would not have to make post election apologies.

On the other point Roosevelt was not so definite. The right of the federal government to construct transmission lines was left up in the air. He seemed disinclined to go beyond the stand taken in his home state. But in his message of March 12, 1929, to the legislature he had stated that if the private companies would not accept his proposal "then the State may have to go into the transmission business itself." And I was so confident that the private companies would never agree to that plan that I was convinced he would approve government lines when the time came.

I Miss the Boat. To begin the interview, I had handed Roosevelt the previously noted introductory statement to my bulletin. He read it carefully and exclaimed "Fine! And add this." I scribbled away several minutes in my notebook while he dictated. Then, I protested: "Good heavens, Governor, I can't get all that on the front page of this pamphlet! You put all that into a campaign speech." Whereat we had a good laugh and turned to my questions.

A few months later I came to regret my interruption. At the moment I had not realized he was outlining his vision of regional planning for development of the natural and human resources of the Tennessee Valley, in addition to the provisions of the Norris bill for navigation, flood control, and power.

F. D. R. did not reveal his Tennessee Valley plans in a campaign speech, but at Warm Springs, Georgia, on February 2, 1933, at a press conference he announced his proposals as he had stated them to me. Had I been alert enough, less intent on printing space, and added a page or two to my pamphlet I might have announced one of the world's greatest designs for regional planning, later embodied in the TVA Act.

Back in my hotel at Poughkeepsie, I was tackled by a bevy of reporters. I told them that with the exception of Senator Norris, F. D. R.

was the best informed statesman on the philosophy and technical details of the power issue I had met in 25 years and that if elected he would fight for the same policies he had as governor.

The score in my subsequent bulletin showed that on ten test questions Hoover favored the power corporations position on seven, the public on one and that he was silent on two. Roosevelt favored the public interest on nine and was uncertain on one. On that basis I predicted that Hoover would veto another Norris bill and Roosevelt would sign it even if it included provision for government operation of transmission lines. The bulletin received a surprisingly large press. Two hundred thousand copies were sent to editors, speakers, and educators among others in a nationwide distribution. I was pleased that many papers emphasized the statement of the scientists.

The Vote. The landslide of 1932 exceeded the landslide of the previous presidential election. Roosevelt received 472 electoral votes, Hoover 59. The popular vote for Roosevelt was 22,809,638; for Hoover, 15,758,901; and for Norman Thomas, 884,781.

CHAPTER XXIII

PASSAGE OF THE T.V.A. ACT

President-elect Franklin Delano Roosevelt did not wait until he entered the White House to assure the nation that his campaign pledges would be kept. He had promised leadership in developing public power on the Columbia, Colorado, St. Lawrence, and other rivers and had concluded with the words: "Never shall the federal government part with its sovereignty and control over its power resources while I am President of the United States."

Roosevelt was detained at Albany to round out his term as governor, which ended on December 31, 1932, and to attend to private affairs. On the way to Warm Springs, Georgia, for a rest, he made a personal inspection of the Muscle Shoals project on January 20. He declared it to be twice as large as he anticipated. He was accompanied by Senators George Norris, Hugo Black, Kenneth McKellar, and Cordell Hull and by Representatives Lister Hill, John J. McSwain, and several others with whom he discussed future action on the project.

The next day at Montgomery, Alabama, standing on the exact spot on which Jefferson Davis took the oath of office as president of the Confederacy, Roosevelt outlined his solution of the Muscle Shoals problem. He would continue government operation and put the project to work at once. Setting aside the compromise bills vetoed by Coolidge and Hoover, he advocated multipurpose development of the entire river system for navigation, flood control and power, as proposed by Senator Norris in 1926. His unique contribution, later amplified, was regional planning to conserve natural and human resources in one comprehensive enterprise.

Beyond that, Roosevelt signalized that his vision and plans were nationwide. On the trip with him were Frank P. Walsh, chairman of the New York Power Authority, F. E. Scattergood, chief engineer of the Los Angeles Public Power System, Frank R. McNinch, member of the Federal Power Commission, and Senator Clarence Dill of Washington. Their presence was fair warning that public power development and the regulation of private power companies would have very different treatment at his hands than they had received during the previous 12 years.

The TVA Message—Regional Planning. By the time Roosevelt took

office, on March 4, 1933, at least 15 million people were unemployed and business was at a standstill. Our financial structure was in such a perilous condition that all banks were closed by executive order until emergency measures could be taken to restore confidence and prevent collapse. Congress was called into extra session.

On April 10 Roosevelt started moving on the Muscle Shoals problem with the following message to Congress:

"The continued idleness of a great national investment in the Tennessee Valley leads me to ask the Congress for legislation necessary to enlist this project in the service of the people.

"It is clear that the Muscle Shoals development is but a small part of the potential public usefulness of the entire Tennessee River. Such use, if envisioned in its entirety, transcends mere power development; it enters the wide fields of flood control, soil erosion, afforestation, elimination from agricultural use of marginal lands, and distribution and diversification of industry. In short, this power development of war days leads logically to national planning for a complete watershed involving many States and the future lives and welfare of millions. It touches and gives life to all forms of human concerns.

"I, therefore, suggest to the Congress legislation to create a Tennessee Valley Authority—a corporation clothed with the power of Government but possessed with the flexibility and initiative of a private enterprise. It should be charged with the broadest duty of planning for the proper use, conservation and development of the natural resources of the Tennessee River drainage basin and its adjoining territory for the general social and economic welfare of the Nation. This Authority should also be clothed with the necessary power to carry these plans into effect. Its duty should be the rehabilitation of the Muscle Shoals development and the coordination of it with the wider plan.

"Many hard lessons have taught us the human waste that results from lack of planning. Here and there a few wise cities and counties have looked ahead and planned. But our Nation has 'just grown.' It is time to extend planning to a wider field, in this instance comprehending in one great project many States directly concerned with the basin of one of our greatest rivers.

"This in a true sense is a return to the spirit and vision of the pioneer. If we are successful here we can march on, step by step, in a like development of other great natural territorial units within our borders."

The "Yardstick" Idea. In the document proposing the creation of a regional authority, the new President emphasized the conservation

of human resources as a factor in regional planning more strongly than ever before and gave notice that the Tennessee River experiment was to serve as a pattern for regional planning for other watersheds. In his Portland, Oregon, campaign speech, Roosevelt referred to such experiments as yardsticks "to prevent extortion against the public."

Meantime, there had been further conferences with the President. The leaders in both Houses of Congress were ready with bills to effectuate the enlarged program.

A day after the President sent his message to Congress Senator Norris in the Senate and Representative John J. McSwain in the House introduced bills creating the Tennessee Valley Authority. The next day the Senate Committee on Agriculture reported the Norris bill (S.1272) favorably without holding hearings and it went on the calendar.

The House Military Affairs Committee, of which McSwain was chairman, was more deliberate. Hearings were held on his bill (H.R.4859) and others from April 11 to 15. Little new persuasive evidence, pro or con, was presented. The outstanding feature of the hearings was the appearance of Wendell L. Willkie, who on January 1 had been made president of the Commonwealth and Southern Corporation, a New York holding company that controlled several large operating companies in the Tennessee region. Willkie informed the committee that he was a northern Democrat. He was to be the leader of the opposition to TVA development for the succeeding seven years until he became the Republican nominee in 1940 for the Presidency.

Surprisingly enough, Willkie hailed President Roosevelt's proposal for comprehensive development as a great step forward to which he and E. A. Yates (the same gentleman of the famous Dixon-Yates proposal of 1955, aimed at undermining TVA) and other southern power executives present were not opposed provided the government did not build transmission lines to market its power. If the government were to do so, he said, it would destroy utility company investments totaling \$400 million. Government money would be wasted since company lines were already serving the area. Willkie cited Governor, now President, Roosevelt in support of his demand that public power be sold at the busbar to private utilities for marketing.¹

The House Passes The Hill Bill. However heartily a majority of the House members might have rejoiced over the President's program, they still held that the existing plants at the Shoals must be devoted to fertilizer production at full capacity. In this the southern delegations were clearly representing the will of their people whose depleted

lands were in tragic need of fertilizer. The outcome of the House hearings was a comprehensive committee bill (H.R.5081) introduced by Lister Hill, an ardent public power member. A special rule permitted only six hours of debate. Hill opened the discussion. He told about two extensive conferences he and McSwain had with President Roosevelt. "While the bill does not altogether represent my views on this subject, it stands today, in my judgment as the expression, in its broad aspects, of the program of the President," he said. In the debate on the special rule and the bill itself the familiar arguments were repeated; with Treadway, Ransley, Taber, and Eaton leading the Republican opposition. Representative John Rankin, Democrat of Mississippi, who had introduced the text of the Norris bill as H.R.4883, sought to have it substituted for the Hill measure but failed.

On passage, April 25, the vote stood: for, 306; against, 92; not voting, 32.²

The Senate Again Dissents. The six-hour House discussion was mild indeed in comparison with the hectic debate in the Senate, which began on May 1 and consumed the better part of three days. Before the Senate were both the Norris and the Hill measures. Asked by Tydings to point out the difference, Norris named only two points of consequence—the provisions for fertilizer and for transmission lines.

The Norris bill provided for experiment and research in the hope that a process for producing low-cost fertilizer might be achieved. Bankhead of Alabama moved to strike out the Norris fertilizer section and substitute the provision of the House bill. The House text required that "the Board shall manufacture fixed nitrogen and/or other fertilizer ingredients at Muscle Shoals by the employment of existing facilities and by modernizing existing plants . . ." And again: "It shall be the duty of the Board to operate existing nitrate plants . . ." to produce at least 10,000 tons of fixed nitrogen. If sold, production should continue to the full capacity of the plants. But if it is found that the method is not "economically justifiable," then, "it shall be the duty of the Authority to operate such plants and facilities for the production of phosphoric acid and/or other fertilizer ingredients . . ." Bankhead's speech in behalf of his motion reflected the belief of a majority of the southern delegations in Congress that the cyanamid process was not obsolete. Norris replied that the process was obsolete since not a single plant of that kind was being built, that it required too great a subsidy, and that the power trust would be glad to see the power so used if it could not secure possession. During the debate Norris explained that the propaganda of the power trust and the

American Farm Bureau Federation had pictured him as no friend of the farmers because of his stand on fertilizer so he would "call their bluff" once more. Immediately after Bankhead's motion was rejected, Norris proposed an amendment authorizing the President within four months to lease "to the American Farm Bureau or any corporation" the existing facilities to produce commercial fertilizer at a rental of only one dollar a year, and provide them with government power at cost. The amendment was adopted and went in substance into the final bill. The opportunity thus legally available has never been embraced.

Bankhead lost by a roll call vote of 12 to 73.⁸

Government Transmission Lines? In both bills the provisions for transmission of power were long and specific. Both gave preference to states, municipalities, and farm cooperatives in use of the electricity generated. Both gave the TVA the right to construct, lease, or purchase high-tension lines. They differed in one important particular. The Norris bill "expressly authorized" the TVA board to decide what method it would employ. It was empowered to construct its own lines by appropriations from Congress, by the sale of bonds, or from funds secured by the sale of power. But Bankhead moved to substitute the provisions of the House bill which required the board to negotiate first for the sale of power at the busbar, and "in the event the board was unable to make satisfactory contracts with persons, firms or corporations engaged in the distribution of electricity," then it might proceed to construct its own lines but not until it had "the approval of the President . . . if found economically justified and necessary to carry out the provisions of this Act."

Senator Bankhead claimed his amendment would save millions of taxpayer dollars and avoid the alleged economic sin of duplicating lines. He crowned his effort by asserting that "this idea is entirely in line with the views that President Roosevelt had entertained on this subject." In proof he read excerpts from Roosevelt's speeches and writings as Governor, and inserted in the *Congressional Record* the entire text of the act Roosevelt had signed in 1931 creating the New York State Power Authority.

True enough, the New York Power Authority act provided (section 10) for sale at the busbar. But if the authority found itself unable to agree with the private utilities on the terms of a contract, it had to defer to the governor and legislature for further action.

Norris replied that the fatal loophole in the Bankhead substitute was that whenever the TVA board desired to build a transmission line the

door was open for the utilities to bring an injunction on the ground that the board had not sought to negotiate a "satisfactory" contract with them. Endless litigation would frustrate effective development of the project. Norris flatly denied that the New York Power Authority Act reflected Roosevelt's personal views on transmission and distribution. He recalled that, as Governor, Roosevelt was compelled to compromise with the Republican legislature to insure passage of the law. A heated dispute that followed ended with Norris' exclamation: "If the Senator from Alabama or anybody else can bring a statement from Roosevelt that he favors that amendment to this bill, I will promise to wire my resignation as a member of the Senate to the Governor of my state within ten minutes after it is produced!"

Bankhead asked for a roll call vote, but could not get enough Senators to join in the request and the amendment was lost by a voice vote. No statement from Roosevelt was produced. The Senate's bill was then substituted for the House bill (H.R.5081), and passed 63 to 29.⁴

The "Birch Rod." If the people are to obtain the full benefits of low cost power from a public system the right to construct and operate high-tension, long-distance transmission lines, or "grids", is just as essential as dams or electric generators. Utilities today still try to make it impossible to transmit government power from dams to consumers, just as they did in 1933. This gives the government no choice but to sell its power to the utility which can build the lines to the dam.

Representatives McSwain and Hill and Senator Bankhead had good reason for claiming that their proposal was in line with the President's ideas. As a matter of fact, Norris himself and Roosevelt had been at odds on the subject of transmission lines since 1929 and the uncertainty was to continue to within 48 hours before the TVA Act was signed. I know. I was there.

Norris was safe in challenging Bankhead to produce a statement from the President favoring busbar sales because Bankhead had not stated the conditions Roosevelt had laid down for such sales; namely, the elimination of all "water" from securities and six or eight percent profit on the "actual cash" invested in transmission and local distribution facilities.

But suppose the House provision, requiring the TVA Board to first negotiate sale of power at the busbar, should be inserted in the bill, what then? Would the President agree? Norris was worried—he had no more faith in that policy than Roosevelt had in state regulatory commissions.

The Senator's disagreement on this point began with Roosevelt's message to the New York Legislature on March 12, 1929, accompanied by a bill for development of the St. Lawrence site.

Edward Keating, former Democratic member of Congress from Colorado who was then editor of *Labor*, the weekly newspaper of 15 railroad unions, asked Norris' opinion of the governor's policy. The Senator's response appeared in the March 23rd issue of the paper:

"Governor Roosevelt has taken a step—a very brave step—in the right direction. But he has stopped to change horses in the middle of the stream. He will find that there is no logical place for him to stop until he comes clear across and advocates public ownership of the distributing system as well as the generating system . . ."

Roosevelt had repeated his first-chance-to-private-companies policy in an address before the 1931 governors conference at French Lick, Indiana, and again in his major campaign speech on power, September 21, 1932, at Portland, Oregon. Here he compared the right of the federal government and a state to own and operate their utilities to "a birch rod" in the cupboard to be taken out and used only when needed. He said:

"When so developed by government, private capital should, I believe, be given the first opportunity to transmit and distribute the power on the basis of the best service and the lowest rates to give a reasonable profit only.

"The right of the Federal Government and of the State government to go further and to transmit and distribute, where reasonable and good service is refused by private capital, gives to Government—in other words, the people—that very same essential 'birch rod' in the cupboard."

Believing that Roosevelt would support and sign his comprehensive Muscle Shoals bill, Norris had announced he would campaign for the governor. But this "birch rod" idea alarmed him. Roosevelt, on his return east, addressed a huge crowd at McCook, Nebraska, Norris' home town, with high praise for the Senator's statesmanship. In a letter to me soon after, Norris wrote: "I stated in my remarks introducing Governor Roosevelt that I did not agree with him 100 percent on power but that his position on public utilities was the most progressive ever taken by a candidate for President."

I was well aware that the main disagreement was over transmission lines, and that the Senator, sensing trouble ahead, had given fair warning that he would not compromise on that essential. And so the

matter stood when Congress was summoned for a special session after the inauguration.

The Final Deadlock. It was now May 8, 1933. For five days the Senate TVA bill had been on Speaker Rainey's desk with no action taken although everybody expected swift consideration to help relieve unemployment. Disturbing rumors were afloat, not only that the old conflicts between the House and Senate were still in evidence but that unexpected differences in each of the committees in charge of the bill had arisen over its final terms.

In those days I used to have my consultations with Senator Norris when driving him to and from the Senate Office Building. On that morning my wife and I picked him up at his home in Cleveland Park and all the way to the Hill he held forth on Muscle Shoals in most vigorous English. He was a man of deep emotions and only once had I ever seen him so agitated—that was back in 1925 when the Underwood bill was in danger of passing. Cotton Ed Smith had gone over to the House position on transmission and fertilizer. Norris' bill was about to be stalemated again, and he was angered. He would not keep silent after 12 years of labor to allow the bill to be mutilated, the people robbed of low-cost power and disappointed as to fertilizer. He declared, "I am going on the floor today and raise hell! I'll tell the country what and who is at the bottom of all this."

I remonstrated, pointing out that this would be a bad blow at the administration, so soon in office, and might start frictions that would jeopardize final enactment of a TVA bill. I said I thought I could do something to help and begged him not to make the attack that day. He was reluctant, but finally agreed.

On reaching my office, I phoned Harold L. Ickes, Secretary of the Interior, whom I had known since Bull Moose days, and asked to see him. He was about to depart for a cabinet meeting. "All the more important," I said. After giving him a hint of my errand, he agreed to wait and I laid the situation before him. At that time Ickes was for regulation but was not a public power advocate. He asked, "What can I do?" "Tell FDR that Norris will break loose tomorrow," I replied. "Suggest that he call the Senator and John McSwain to the White House tomorrow forenoon, and tell John where he stands."

"All right," Ickes agreed. "Now let's go or I will be late."

A few days later Ickes wrote me a note which, condensed, said—"Well, Judson, I delivered and you can see what happened!"

This Is What Happened. The next day, Chairman McSwain asked unanimous consent to take the TVA bill from the Speaker's desk, to

disagree with the Senate bill and ask for a conference, explaining: "The President invited Senator Norris and myself to the White House this morning for a conference. The President indicated in very unmistakable terms his desire that this bill should go to conference promptly and that he wanted speedy action."

Prior to this something else had happened. Chairman McSwain and Senator Lister Hill were at odds on transmission lines. So Hill, who favored public lines, confidentially advised the former Speaker of the House, John N. Garner, now Vice President and presiding over the Senate, to call a conference and invite McSwain and himself. Garner obliged and after the discussion very positively asserted, "John, its no go. We have got to have government transmission lines."

Besides losing the support of the President and the presiding officers of both chambers of Congress, more trouble threatened Congressman McSwain. Representative John Rankin, Democrat of Mississippi, had introduced the Norris bill and persistently fought for it to no avail. He was about to move that the House conferees be instructed to report the Senate bill. Another bitter debate was in prospect, but after McSwain's statement Rankin told the House he would withdraw his motion as he felt sure the power distribution provisions of the Norris bill would be agreed to. That brought applause, whereupon Speaker Rainey, a strong public power man, appointed McSwain, Hill and James as conferees. The Senate appointees were Chairman Smith, Norris, Wheeler, and McNary.⁵

The conferees reported back on May 15. The main text of the Norris bill had survived. On the two high points of dissension, the final bill provided that while the TVA Board was authorized to recondition the nitrate plant and to manufacture and sell commercial fertilizer to any extent by employing the cyanamid process if desired, it was not directed to do so and it never exercised the authority. Likewise it might sell electric current at the busbar or construct transmission lines at its own option. Norris had won on both counts.

The Senate agreed to the conference bill on May 16 without a single comment from any Senator. The House approved the next day after a brief debate by a roll call vote of 258 to 112, 60 not voting. The party line-up stood: For: 241 Democrats, 18 Republicans, and 2 Farmer-Laborites. Against: 28 Democrats and 88 Republicans.⁶

On May 18, 1933, President Roosevelt signed the bill surrounded by a goodly company of Senators, Representatives, and others who had led the fight for the measure. The 35-year legislative warfare

over who should control development of the Tennessee watershed had ended—for the time being.

The First TVA Board. The Board of Directors appointed by President Roosevelt to implement the TVA Act was composed of a civil engineer, Dr. Arthur E. Morgan, president of Antioch College; an entomologist and authority in agricultural science, Dr. Harcourt A. Morgan, president of the University of Tennessee at Knoxville; and an attorney and specialist in utility law, David E. Lilienthal, member of the Wisconsin Public Service Commission.

Confirmed by the Senate, the TVA Board held its first meeting on June 16, 1933, and began work on its precedent-setting task.

CHAPTER XXIV

RETROSPECT AND PROSPECT

TVA has now been in operation for 25 years during which the turbulent Tennessee River has been harnessed and put to work. Add to this period the 35 years' conflict over the establishment of the project, and we have the events of 60 years before us for review. Two questions immediately occur: What is the demonstrable truth about the practical results of this experiment? And, what of the future? As a guide to national policy, should the Tennessee Valley Authority be continued, revamped, or eliminated? Adequate answers to these questions, very much in the public mind because of the Eisenhower administration's effort to tear down TVA and similar federal programs, would require volumes; therefore, they cannot be undertaken here. There is, however, another approach from which to review the 60-year period that is within our scope.

At the turn of the century our nation was still engaged in unrestricted exploitation of resources. There had been no fear of shortages; when resources played out in one place exploiters moved on to new areas. Then the conservationists appeared. They saw the country's forests, minerals, water power, soil, and other basic assets being frightfully wasted and monopolized. They saw that resources were not inexhaustible and that soon there would be no new areas for exploitation. They believed that in the national interest waste, ruthless exploitation, and monopolization must cease and private capital must submit to regulation and control. They propounded what they described as the "new attitude." Their doctrine was at once assailed as impractical, socialistic, and treasonable to the American way of life, but its fundamental concepts prevailed and in 1935 much of it was embodied in the act creating the Tennessee Valley Authority.

Fundamentally, our 60-year story has been one of the inevitable resistance of unregulated private exploiters to the new situation; of the individual battles between the old attitude and the new; and of the development of ideas and policies for the new era. The evolution is not complete. The struggle is still going on in Congress over bills to facilitate (or paralyze) the TVA and federal resource programs on the Columbia, the Missouri, and other rivers, and on many other

natural resource fronts. We will see the battle continuing in the 1960 elections and for generations to come.

On this background, let us list and examine some of the new ideas, some basic and some of limited scope. Knowledge of them is quite as important as knowledge of physical structures and financial considerations.

1. *Jurisdiction: That the federal government has jurisdiction over the development of hydroelectric power resources.*

The 1897 bill to permit a private company to build a lateral dam to generate hydroelectric power at Muscle Shoals provided no compensation for the use of the falling water. Congress amended the bill to include a charge. Power companies fought federal jurisdiction and the states' rights battle was begun. It continued until the Supreme Court in the New River case in 1940 affirmed federal jurisdiction over hydroelectric power in the navigable waters of the United States.

2. *Ownership: That the potential water power in navigable rivers of the United States belongs to the American people.*

Conservatives stoutly held that riparian owners of land adjoining power sites had an exclusive right to develop power under state laws, but in 1913 in the Chandler-Dunbar case the United State Supreme Court held otherwise, and in 1920 Congress, in the Water Power Act, nailed down title to the remaining sites that had not been given away. This included about 90 percent of the national total, then estimated at around 50 million horsepower.

3. *Federal Leadership: That development of great river systems was a job for the national government since the states could not or would not undertake it and private capital openly declared it was beyond its financial capacity or functions.*

The early conservationists decided on government leadership because even then the states were too much under the political control of the utilities and bankers. Their foresight proved correct. Not a single state has since undertaken comprehensive development projects and interstate compacts have come to nothing. President Hoover's offer in 1931 to turn the Muscle Shoals project over to the Tennessee Valley states was declined.

4. *Independent Management: That the planning, construction, and operation of such comprehensive projects should be placed in the hands of new, independent federal agencies, and not under existing agencies.*

This surprising recommendation of the Waterways Commission in 1908 was aimed at avoiding long delays and even sabotage, certain

to result from conflicting interstate interests and departmental jealousies. New agencies accept new ideas while the inertia of the old delays progress.

5. *Decentralization: That an enterprise of the size and complexity of TVA is too big to be managed by absentee bureau chiefs in Washington.*

TVA was made a government corporation so it could easily locate its headquarters and its employees in the valley in direct contact not only with state and local officials but with the people it would serve. The citizens soon found out that the "Authority" was there to supply basic services and help them help themselves. They have cooperated gladly and with vigor. The charge that TVA is a superstate suppressing freedom has been repudiated by the people and state and local governments throughout the valley.

6. *Research and Invention: That government should undertake research related to resources development and conservation.*

The fertilizer problem which divided congress for years was quickly solved by TVA's application of research and scientific knowledge. The authority early engaged Dr. Harry A. Curtis as head of a team of scientists to solve the problem. The old nitrate buildings were soon housing laboratories, electric furnaces, and manufacturing plants. TVA developed economical, highly concentrated phosphate fertilizer. By using it and getting thousands of "demonstration" farmers to plant legume crops for the nitrogen they release to the soil, TVA quickly got a vast soil-saving, soil-building program under way in 30 states. The fertilizer industry, which for 12 years declared that it would suffer or be bankrupted by government invasion of its field, is now taking advantage of TVA discoveries. The industry is prospering as never before. It has free use of the patented processes, but no monopoly is granted to any one company, and TVA has demonstrated that public research on practical problems of conservation can help everyone—those who have the problems and those who benefit from the new markets that are created.

7. *Multipurpose Engineering: That the most effective and economical way to control a river is to harness it and its tributaries from source to mouth with a series of high dams plus afforestation and erosion control.*

This concept of socially minded engineers and scientists was first officially recommended in 1908 in the preliminary report of the Inland Waterways Commission appointed by President Theodore Roosevelt. This approach, it was urged, would give dependable year-round navi-

gation, flood control, electric power, irrigation and municipal water supply in arid regions, and other benefits in one coordinated operation. It would also save untold millions in cost of construction, maintenance, and management. True, it would be expensive, but not in the long run. A major part of the cost would be met by the sale of hydroelectric power. But that was the hitch! Private utilities wanted the power sites, without cost. Had this bipartisan commission proposed that private utilities be taken into partnership for exclusive production and sale of the power, without a doubt the whole river basin development idea would have been hailed as a national benefaction and development would have proceeded apace. Instead, the utilities denounced the plan as chimerical, went into politics, and held it up for 25 years. TVA is the only project where the concept has had anything approaching a fair trial.

8. *Power and Flood Control: That it would be an economic crime not to generate power at public dams on the assumption that the reservoirs must be kept empty to hold flood waters.*

TVA gave answer to the false assumption that power and flood control conflicted. This was proclaimed by special interests for nearly two generations to block development and it appeared plausible to the uninformed. The devastating floods in most areas occur intermittently between January and April. Rainfall is generally lightest, or it falls as snow, in the winter months when power demand is high. Consequently, the levels of reservoir dams are lowered and ready for heavy spring flows in the natural water cycle. Reservoir level management can take care of occasional off-season storm waters, especially where reforestation and afforestation exist.

Centralized control of an entire river system has given remarkable results in the Tennessee Valley especially in 1946, 1947, 1948, and 1957 without a large loss of potential power. Chattanooga alone was saved an estimated \$120 million damage, including \$66 million from the catastrophic flood of 1957, by TVA flood control operations. Municipalities and farmlands on the tributaries and the river below were also protected. To this must be added damages averted on the lower Ohio and Mississippi from several floods during this period; for example, crests were lowered in the two 1950 floods by 1.9 and 1.2 feet at Cairo, Illinois, by the TVA system, relieving both the city of Cairo and 200 square miles of rich farmland that might have been flooded.

9. *Power for Defense: That it is wise for the government to have available its own source of power, ready for instant defense use.*

TVA and the Columbia River dams "saved our lives" in World

War II. They made possible production of phosphorus, nitrates, light metals and other war materials, including materials for the atom bomb. By their nature, private profit-making utilities do not develop generating capacity faster than customers will buy the power. Consequently, utilities have always lagged behind demand. They contended that Tennessee River power could not be fully used for 100 years. Fortunately, the government developed the river so that it was in a position to make quick use of existing plants and expand generation when World War II occurred. TVA plus the Columbia Basin, where new dams were being brought into production, became known as the Arsenal of Democracy because their government-owned facilities could meet skyrocketing power requirements quickly. Since World War II there has been a federal "defense power" program which exists entirely to assure the nation adequate electric capacity in case of a future emergency.

10. *Navigation: That source-to-mouth, multipurpose developments, including high reservoir dams, afford shippers a much better navigation channel than low dams.*

Beginning in 1922, the Army Engineers made a comprehensive survey of the Tennessee River and in 1929 recommended a series of 32 low dams to provide a 9-foot, 652-mile navigation channel between Knoxville and the Ohio River at government expense but with the proviso that private companies, if they desired, could build and finance higher dams to generate power under the Federal Water Power Act. The survey cost \$1,090,800, was sent to Congress on March 24, 1930, by Secretary of War Patrick J. Hurley, and printed as House Document No. 328, 71st Congress, 2nd Session.

The TVA Act pigeonholed that proposal and a modern deep channel was completed in 1945. Cost was justified by a 1940 estimate that in 1960 the waterway would be carrying 7 million tons of freight annually and save shippers \$9 million. In 1956 the tonnage was up to 10 million. The deeper, slack-water channel with relatively few locks is far superior to the army's original plan. Stored water in the big reservoir dams assures dependable navigation even if there is drought, such as has seriously hampered navigation in the Mississippi River in recent years.

11. *Nondiscrimination in Power Supply: Since electric service vitally affects their daily lives and welfare, average citizens as well as giant industry should be assured the benefits of low-cost power.*

During the 1920s large industries over the nation were able to buy private company power at from one to two cents per kilowatt hour; otherwise, they would install their own generating plants. Domestic,

commercial, and other small users were charged an average of seven to nine cents per kilowatt hour, far beyond the cost of delivery. By 1933 an estimated 225,000 residential customers in the TVA area used around 50 kilowatt hours per month, for which they paid the companies an average of 5.7 cents per kilowatt hour. In the year 1956 a total of 1,270,000 domestic customers bought an average of 490 kilowatt hours per month from TVA, at a cost of 1.16 cents per kilowatt hour. When the TVA and plants of its 149 distributors are out of debt, this 1.16 cent rate can be cut still lower. The day of economic, all-electric homes, heated and air-conditioned cheaply, has already arrived in the Tennessee Valley.

12. *Preference: That since the people own government projects, the people's municipalities and rural cooperatives have the first right to purchase the power therefrom. The surplus can be sold to private parties.*

This is the so-called "preference clause" that has been inserted in federal laws from 1906. Challenged as unfair to power companies, *it is now sought to be circumvented and repealed but repeated attacks have been repulsed to the present.*

13. *Rural Electrification: That rural America could be provided electricity.*

Throughout the battles over Muscle Shoals, Senator Norris and his group emphasized the need for rural electrification and Congress took notice. Service to farmer cooperatives was authorized in the TVA Act of 1933, and in 1934 several cooperatives began operation. President Roosevelt created the Rural Electrification Administration by executive order in 1935 and the Norris-Rayburn Act of 1936 established it in law.

In 1922 the National Electric Light Association and the American Farm Bureau Federation started a campaign to "electrify rural America" but held that what farmers needed was education, that rates were not an essential factor although they ran from 8 to 20 cents per kilowatt hour. By 1934 the number of the nation's farms electrified had only increased from 2.6 percent to 10.9 percent, with six million farms unserved.

Industry executives informed the country that "areawide service" to farmers was economically impossible, that most farmers lived too far apart, and their power use was too small to pay for lines. Yet a bitter campaign, including the erection of "spite lines," was launched against the formation of cooperatives. But undaunted and undeceived, the farmers went ahead and succeeded in all states except Massachusetts, Connecticut, and Rhode Island, which have no co-ops because

of the political influence of private utilities. More than 95 percent of the nation's farmers now have electric power.

14. *Labor Relations: That the government should be a model employer and that just labor relations can best be insured by collective bargaining with bona fide labor unions.*

In 1933 the idea of collective bargaining by government was rank heresy to the majority of federal, state, and municipal officials. TVA board members thought otherwise. In their opinion, with ten mammoth dams to build, requiring a labor force of 10,000 employes, the project needed a trained, satisfied, loyal crew of men and women. The TVA Board aimed at uninterrupted construction. The act directed TVA to pay "not less than the prevailing rate of wages" and with "due regard. . . to those rates which have been secured by collective agreement by representatives of employers and employes." Norris had seen to that. After conferences between management and union labor, with David E. Lilienthal for the board and Marion H. Hedges, research director of the International Brotherhood of Electrical Workers, for organized labor, a precedent-making policy was worked out and approved by both parties. The agreement assured: the right of collective bargaining and labor participation in management; the right of labor to organize in unions of its own choosing; the freedom of employes to join or not to join unions because federal law precluded closed shop contracts; an annual wage conference to establish equitable wage schedules and working conditions, with grievances from either side to be promptly considered and settled; a five-day, 40-hour week with time and a half for overtime and vacations with pay; and efficient apprentice training and advance training for journeymen and helpers.

Since thousands of workers would have to live for long periods in camps in regions remote from the towns, the Authority added the following on its own account: model construction camps for married and single employes with standard educational facilities for children; community houses with recreational facilities for all; a model health and sanitation program with complete hospitalization and medical service; and a safety program that achieved new lows in the severity and frequency of accidents. Cooperating in framing the labor policy were craft unions of electrical workers, machinists, blacksmiths, carpenters and lathers, bricklayers, boilermakers, plumbers and steamfitters, operating engineers, iron workers, sheet metal workers, plasterers, painters, teamsters, and hod carriers. These unions formed the Tennessee Valley Trades and Labor Council, which negotiates with TVA at the annual wage conferences.

Construction of the Dams. When the TVA Board took over Muscle Shoals from the Army Engineers on June 16, 1933, it included Wilson Dam, the steam plant near Nitrate Plant No. 2, and a small steam plant at Nitrate Plant No. 1. Construction of Norris and Wheeler dams was immediately begun, and by March 1936 a grand plan for the unified development of the Tennessee River system had been worked out and approved. The schedule called for 10 new dams for navigation, flood control and power to be completed by 1944. Some were built ahead of time because the peacetime schedule of TVA was interrupted by World War II. All scheduled dams were built, and an additional one, Douglas dam, was built in the world-record time of 12 months and 16 days, within the estimated cost, to help supply the power to meet Roosevelt's goal of 50,000 war planes a year.

Meanwhile the purchase of the Tennessee Electric Power Company, in 1939, brought more dams, including Hales Bar. By 1956 the Tennessee Valley Authority was operating 25 dams, 20 of which it had built. In addition the Authority directed the storage and release of waters of five major dams owned by the Aluminum Company of America. Today a single office controls the water flow in the Tennessee River and its developed tributaries for flood control, navigation, and power. The once destructive river has been tamed and its power serves mankind instead of destroying properties.

TVA's first steam generating plant was started in 1940 in response to military needs. It was a 240,000-kilowatt steam plant at Watts Bar on the Tennessee River below Knoxville, first built to supply power for a secret project at Oak Ridge, which was later disclosed to be manufacturing materials for atomic bombs.

The war over, continuing atomic bomb production plus growing civilian demands threatened a power shortage, but since all major damsites had been harnessed, the TVA board requested funds to construct a steam plant at Johnsonville in western Tennessee. The private power companies launched a bitter attack on the proposal, alleging that they should be given the right to supply the needed power. The 80th Republican Congress failed to approve the project, but the 81st Democratic Congress (1947-1948) voted the funds. Construction began on May 12, 1949, and operation commenced on October 27, 1951.

By 1950 the Korean War, the threat of Russian aggression, and the speed-up of the atomic age again thrust peacetime planning into secondary place. Unprecedented amounts of power for defense were needed. Congress, with an eye to economy, directed TVA to build six additional steam plants to meet the situation. First came Widows Creek,

a 675,000-kilowatt station, begun on March 28, 1950. And then between January 1951 and November 1953 five more great stations were built. The total capacity of the six stations adds up to 5,175,000 kilowatts. By 1957, 50 per cent of TVA's whole power production went to defense and defense-related uses. Over one-half was taken by the huge plants of the Atomic Energy Commission at Oak Ridge, Tennessee, and Paducah, Kentucky.

The Ebasco Fiasco. Providing energy for the huge gaseous diffusion plant at Paducah developed a nationally heralded race between the Tennessee Valley Authority and private utilities. The Atomic Energy Commission asked TVA to furnish all the power, but changed its mind in December 1950. The Atomic Energy Commissioners decided to get half the power from a new private corporation, organized by a group of private utilities for the purpose and styled "Electric Energy, Inc." It would build its steam plant at Joppa, Illinois, directly across the Ohio River from TVA's Shawnee steam plant at Paducah. The conditions were the same and the power trust press boasted their private enterprise would show government inefficiency a clean pair of heels, building faster at less cost. The private companies employed Electric Bond and Share Company to do their construction work.

TVA got its first unit into operation on April 9, 1953. The private Joppa plant was many weeks later getting a unit in operation. TVA stayed within its cost estimates. Electric Energy, Inc., exceeded its estimate by many millions of dollars.¹

The race became famous as the "Ebasco Fiasco." In fact, Electric Bond and Share Company had to be fired and others put in charge of construction before the private plant was completed.

Defense Power Savings. It is well known that TVA's low rates are saving civilian power consumers nearly \$103 million a year compared with average rates prevailing in the nation. Furthermore, they became a yardstick for measuring power rates. TVA rates have reduced private rates in adjoining states. It is not common knowledge that the yardstick is saving the United States Treasury sums on power for defense which make the above figures appear modest.

According to Edison Electric Institute reports for the past five years, railroads and large industrial users have been paying private companies a national average of about 1 cent, or 10 mills, per kilowatt hour for electricity. The Atomic Energy Commission has been buying power from TVA for less than 4 mills. If there had been no TVA Uncle Sam would have to pay private companies the private average of 10 mills, assuming they could deliver. This conclusion is fortified by the fact

that in the continental United States in fiscal 1956 the Army paid utilities an average of 10.8 mills per kilowatt hour for electricity at all its installations—a little more than private utilities charged railroads and heavy industry. The vast proportion of this power came from private systems.

The AEC is now purchasing from TVA and the private plants at Paducah a grand total of around 50 billion kilowatt hours annually at less than four mills per kilowatt hour in both cases. It is left to readers to estimate what Uncle Sam saves on his own power bill because there is a TVA. On a 50 billion (kilowatt hour) demand, each saving of one mill per kilowatt hour equals \$50 million.

Investment, Repayment and Taxes. The canard that TVA is subsidized and not paying out is widely spread around the nation. The 1957 annual report of the TVA reveals the falsity of such charges. TVA financial statements are audited and reviewed by the General Accounting Office. The power program was required by the 1933 Act to be "self-supporting and self-liquidating." The Comptroller General reports that payments of \$216.5 million made to the Treasury by TVA since 1948 are \$68 million, or 46 percent, ahead of schedule, noting that net earnings annually average four percent of the investment. The canards against TVA are thus completely demolished by the audited, financial facts.

Taxes. Another charge made against TVA is that it does not pay taxes. The Federal Government does not pay income taxes to itself on its own property. However, the TVA Act provides that five percent of gross power income, exclusive of sales to Federal agencies, be paid to states and counties involved "in lieu of taxes." From 1933 to 1957 the total so paid amounted to \$45 million and the municipalities and rural cooperatives had paid \$64 million. This tax system was decided upon by federal and state authorities. It is satisfactory to them and TVA is paying off as planned, without any burden on the nation as a whole.

First Major Assault on TVA. In addition to perennial criticism of TVA, two major assaults on the enterprise have aimed at the destruction of the unified, basinwide development plan: One was made during the administration of President Roosevelt, the other in that of President Eisenhower. The first assault came in 1938. In response to pressure from private utility and banking interests and on the insistence of right-wing Republicans in both Houses, a resolution was passed for an investigation of TVA by a joint congressional committee.² Committee leaders expected that corruption in management would be

uncovered. Seemingly sound reasons for the probe had been supplied, surprisingly enough, by the chairman of the TVA board himself—Dr. Arthur E. Morgan.

When the final draft of the TVA Act was under consideration, Dr. Morgan, a distinguished civil engineer who was president of Antioch College in Ohio, was summoned to Washington as a consultant. He had already been selected as chairman of the TVA board although he was not formally named until May 22.

Whether at that time he had mental reservations on marketing the power, or subsequently changed his mind, I do not presume to say. What I do know is that one day he requested me to come to Senator Norris' office for an interview and, to my astonishment, began the conversation by saying emphatically: "I want to tell you one thing. I am not going to fight the power companies." I responded: "Well they are going to fight you. What will you do about it?" Morgan made no answer. I was left to wonder whether he would compromise and cooperate with the utilities and whether his emphasis on the pronoun "I" meant that he expected the other two members of the board, when appointed, to become mere ciphers under his domination.

I did not have long to wait for clarification. Dr. Harcourt A. Morgan, president of the University of Tennessee, scientist and agricultural authority, and David E. Lilienthal, attorney and member of the Wisconsin Public Service Commission, were appointed to fill the three-man board. In June 1933, Chairman Arthur E. Morgan was chosen to manage dam construction, Dr. Harcourt Morgan to manage fertilizer production and David Lilienthal to manage the generation and marketing of power.

Lilienthal acted promptly. On August 25, 1933, three weeks after the board took over, he announced, with the support of Dr. Harcourt Morgan, that the top rate for residential consumers of TVA power would be three cents per kilowatt hour, or one-half that charged by private companies serving the area. Other schedules were of the same order. In compliance with the act, it was to be public power in its flow from the generators to ultimate consumers. No private concern would be allowed to put up a toll gate and reap profits during the journey. Partnership with private concerns was definitely out.

The chairman disagreed, so he told me. He held his peace until the summer of 1936 when, in an interview with the President and Senator Norris, he heatedly opposed the reappointment of Lilienthal, who had drawn the short, three-year appointment when the board was formed. Morgan failed in the attempt.

Power Pools and Partnership. Four months later, on September 30, 1936, President Roosevelt held a conference on power pooling. Wendell L. Willkie was there as president of the Commonwealth and Southern Corporation, which controlled the Tennessee, Alabama, Georgia, and Mississippi power companies. Willkie proposed a transmission pool that would give his companies the whip hand in local distribution. Otherwise, he proposed that the government buy the companies at "fair value," which meant the inclusion of watered valuations. Willkie's proposals were rejected.

Attention next centered on the marketing policy advocated by Chairman Arthur Morgan, as presented in the form of an extensive memorandum prepared with the assistance of George W. Hamilton, former chief engineer of Insull's Middle West Utilities Company, and other private power experts. Morgan proposed a tremendous transmission pool. It would be managed by a joint board of company and TVA officials, which would fix rates and terms of service in wholesaling current to municipalities or to private companies for retail distribution. Next, he would divide the TVA territory into exclusive regions. Willkie's companies would operate in some, the TVA in others in retailing the power, thus eliminating direct competition. If a city or town desired to start a public system in competition with an existing private concern, as Seattle had done, it was forbidden to do so. It could only buy out the private system, paying severance and "incidental costs and damages," which would amount in practice to the private company's own asking figure.

These and other stipulations would have destroyed the preference clause and rendered impossible electric service "at the lowest possible cost." Frank R. McNinch, chairman of the Federal Power Commission, J. D. Ross, then a member of the newly created Securities and Exchange Commission, President Roosevelt, and Senator Norris were in strong opposition to Dr. Morgan's plan. The Senator said publicly: "If I had read his statement without knowing the author, I would unhesitatingly declare that it was the work of a power trust attorney."

On The War Path. Sincerely convinced that he was in the right, Arthur Morgan went on the war path when his plan was rejected. He would secure a congressional investigation and have the TVA Act amended in line with his policies. During 1937 in public addresses and signed articles in the *Atlantic Monthly*, the *Saturday Evening Post*, the *New York Times*, and other publications, the chairman charged his fellow board members with dishonesty and corruption. Finally the other two members of the board, Dr. Harcourt Morgan and Lilienthal de-

manded a showdown, charging Morgan with "unpermissible conduct" on the part of a member of the board. President Roosevelt summoned the three men to the White House for a hearing on March 11, 1938. Lilienthal and Harcourt Morgan had been specific, but when the chairman was asked to present concrete facts to prove his charges he refused to do so. He held that he should give his facts to an investigating committee of Congress. Arthur Morgan was removed from office on March 22 for "contumacy"—contemptuous disregard of or opposition to lawful authority. By the time of the removal there were 15 resolutions for an inquiry pending in Congress; some members predicted that corruptions "worse than Teapot Dome would be revealed." On April 4, 1938, a resolution was passed creating a joint committee of nine members to investigate TVA management.

Senator Vic Donahey (Democrat of Ohio) was made chairman. Lynn J. Frazier (North Dakota) and Representatives Charles A. Wolverton (New Jersey) and Thomas A. Jenkins (Ohio). Four were Democrats: Senators James M. Mead (New York) and H. H. Schwartz (Wyoming), Representatives Albert Thomas (Texas) and Graham A. Barden (North Carolina). The committee engaged Francis Biddle of Philadelphia as chief counsel and T. A. Panter of the Los Angeles Public Power System as chief engineer of a large staff of independent technical experts. W. O. Hefferman was made secretary and auditor for the committee, which had thus prepared itself for a major operation.

The initial hearing was held on May 25, 1938, with Dr. Arthur Morgan as the first witness. The Senate caucus room was jammed with spectators and an army of reporters expecting to make the wires hum with tales of corruption of the Teapot Dome variety.

But Arthur Morgan astonished everyone by saying: "I have not charged that any director of the TVA has taken bribes or stolen money; nor have I charged that any director has profited financially through any transaction of the Authority . . . there are more subtle forms of failure to meet a public trust."

A constrained silence followed this surprising statement. If no evidence of bribery, profiteering, or other personal wrongdoing was to be revealed, the prospect of a scandal went glimmering. The cause of the dissension within the board turned out to be an old-fashioned squabble over administration. The committee heard Lilienthal and Dr. Harcourt Morgan, then reported to Congress: "No evidence has been presented that shows any conspiracy or other unethical behavior . . . The committee is forced to conclude that there were differences of opinion in the board, which became exaggerated out of

all proportions because of the chairman's propensity for attributing moral delinquencies to anyone who opposed him."³

Meantime, the committee's technical staff, having dug into TVA, found that the law had been executed as intended. It was decided that the power division was doing as well as could be expected in view of lawsuits and other harassments brought by private utilities, causing long delay. The policy of marketing the power was sound and would pay its way and amortize the investment, and the rejection of partnership with private companies was justified. In sum, the entire TVA concept of "unified development" was approved.

Three Members Dissent. A dissenting report was filed by Davis, Wolverton and Jenkins. They criticized the conduct of the probe, but found nothing dishonest or corrupt. They stated that the power program was not paying its way and that the deficit was being paid by the taxpayers of the rest of the country; that the investment allocated to power was too low; and that the interest rates were too low for a fair yardstick. Their recommendation was that the whole function of river control, including the construction and operation of power at the dams and the tielines between the different dams should be turned over to the War Department and that other TVA functions should be turned over to appropriate agencies.

The underlying reason for such destructive proposals for future legislation aimed at "reorganization" appears in their statement that there was great need "to protect the rights of private business." Complaint was made that their colleagues had failed to estimate the damage done, if any, to private interests by TVA.⁴

The conflicting reports reflect fairly well, but not fully, the political line up of 1933-39. No rightwing Democrat was then in evidence. Six leftwing Democrats and one Republican (Frazier) would continue TVA as conceived. Three rightwing Republicans wanted to reorganize it, ending competition, low-cost public power and unified river control.

Congress understood and accepted the majority report. No major blitzkrieg against the project was launched until Dwight D. Eisenhower became President in 1952.

The Second Assault. TVA symbolizes the basic soundness of "unified development" based on regional or basin-wide planning. The conservation idea was the brainchild of far-seeing thinkers in both parties; under the leadership of Theodore Roosevelt the Republican Party first promoted it, and under the leadership of Woodrow Wilson and Franklin D. Roosevelt the Democratic Party put it into law and action. Since 1933 the Democratic high command has swung to the

left and the Republican high command to the right. President Eisenhower's "partnership" proposal is the second major assault on the basic principles on which TVA is based.

The Partnership Policy. Announcement of the partnership policy was made by Eisenhower in an address on September 23, 1954, at Walla Walla, Washington, dedicating McNary Dam on the Columbia River. While approving comprehensive Federal projects, Eisenhower insisted that wherever possible private enterprise should be permitted to take over the power part of any project and thus cut down budget expenditures and the national debt. As to power, he said: "It is not a federal responsibility to try to supply all the power needs of our people. The federal government should no more attempt to do so than it would assume responsibility for supplying all their drinking water, their food, their housing and their transportation." The Hells Canyon episode was soon to illustrate for the northwest one meaning of "partnership" and at the very moment President Eisenhower was speaking at McNary Dam, the Dixon-Yates deal was educating the TVA region on another phase of it.

The Dixon-Yates Deal. In December 1953 the TVA board made known its need for funds to start constructing a 450,000 kilowatt steam plant at Fulton, Tennessee, 30 miles north of Memphis to meet the growing civilian needs. Approved by Truman but cut from the budget by Eisenhower, the TVA board was informed that there would be no more money for steam plants.

In lieu of the Fulton plant the President, on June 16, 1954, directed the Atomic Energy Commission (AEC) to negotiate a contract with Edgar H. Dixon, president of Middle South Utilities, Inc., a New York holding company, and Eugene A. Yates, chairman of the board of the Southern Company, also of New York, to supply AEC with power for use by TVA.

Dixon and Yates proposed to build a steam plant for that purpose at West Memphis, Arkansas, across the Mississippi River from Memphis. Secret conferences had been in progress since December. Their offer accepted, they organized the Mississippi Valley Generating Company to execute the contract and build the plant. A 25-year binding contract was signed on November 11, 1954. Omitting description of the complicated financial structure that involved leading Boston and New York investment bankers, let us come at once to how the deal would affect ultimate electric consumers.

The plant (600,000 kilowatts) would cost up to \$107,250,000, to be paid for out of rates. At the end of the contract the company would

own the plant. In comparison the Fulton plant of 450,000 kilowatts and related facilities would cost \$90,000,000, and be amortized in 40 years with TVA in possession of a debt-free plant.

The AEC and Budget Bureau experts admitted that this private power output would cost \$3,685,000 more per year than at Fulton power rates, or \$92,125,000 for the life of the contract. But TVA experts, disclosing jokers in the complicated contract, established that the actual increase would be \$5,567,000 annually or \$139,175,000 in 25 years. This is only one item among many which demonstrated that the contract was drawn in the interest of the company and not of the public.

The inside facts regarding the Dixon-Yates deal which had been kept confidential under cover of "executive privilege" were developed through investigations by the Congressional Joint Committee on Atomic Energy and the Antitrust Subcommittee of the Senate Judiciary Committee in the summer of 1954.⁵

The Deal Is Resisted. Tennessee Valley people declared war on the scheme. They were supported by pro-public power men and organizations and press from coast to coast. A precedent of national importance was being established. As to its significance, Gordon R. Clapp, former chairman of the TVA board, said: "It means that the first step in the strangulation of its electric utility demonstration will have been taken; that the consumers of the Tennessee Valley will be marked for further victimization by the holding companies that surround TVA, to whose strength will have been added the strength of the United States Government against one of its own agencies . . . to squeeze the TVA into submission to the private utilities."⁶

The policy at stake became a campaign issue and a prime factor in giving Democrats control of the next Congress. There were angry debates in Congress, glaring headlines, and as the weeks passed the affair became a national scandal. Finally, when the city of Memphis officially refused to buy the AEC power, and took steps to install a municipal plant, Eisenhower on July 11, 1955, ordered the contract cancelled.

The Government Is Sued. Cancellation, however, did not end the matter or the uproar. The Senate Antitrust subcommittee, chaired by Estes Kefauver of Tennessee, continued hearings. It revealed that Adolph H. Wenzell, vice president and director of the First Boston Corporation of New York, an investment banking corporation taking part in financing the Dixon-Yates deal, was employed as special con-

sultant by the Budget Bureau and participated in planning and negotiation of the scheme.⁷

The effect of this disclosure, carefully hidden from the public by the Eisenhower administration, was like pouring oil on a smouldering fire. Senator Kefauver contended that Wenzell's double role was contrary to the conflict-of-interest statutes. Government attorneys had approved the contract. But now the government attorneys were forced to declare it illegal and not binding on the United States. Dixon and Yates, who had started construction, brought suit for damages on December 13, 1955, for \$3,534,534.45 (to be exact) in the United States Court of Claims.

During the Antitrust Subcommittee hearings, Chairman Kefauver got into the record a copy of a report made to the Budget Bureau by Wenzell, proposing sale of TVA and other federal power facilities to private owners. The White House refused to supply the report to the subcommittee, pleading executive privilege, but it was obtained through Wenzell himself.

The Dixon-Yates scheme and Wenzell's report made it clear that the power monopolists had an open door at the White House and explained not only the deal to undermine the TVA power program but made it easier to interpret Eisenhower power policies in other sections of the United States.

Hells Canyon. Pursuant to the Eisenhower partnership policy, his Secretary of Interior, Douglas McKay, shortly after taking office in 1953, withdrew federal government opposition to the Idaho Power Company's plan for three comparatively small dams in the Middle Snake River between Oregon and Idaho.

The Army Engineers, in a comprehensive plan for development of the Columbia basin, had recommended a giant Hells Canyon dam in the same stretch of the river.⁸ President Truman attempted to get the big dam authorized and built. Korean war demands for appropriations and power trust opposition blocked him, so the Idaho Power Company applied to the Federal Power Commission for license to build its little dams instead. The Korean war over, public power proponents renewed their drive for a giant Hells Canyon dam, but the Federal Power Commission, ignoring measures pending in Congress and its own responsibility to recommend federal construction, if that was best, issued licenses to the power company. As a consequence, dams that will yield only one-third as much flood control and less than one-half as much power as a high Hells Canyon dam are being built

in the Snake River Canyon, which is deeper than the Grand Canyon of the Colorado River.

Although Eisenhower had publicly praised Theodore Roosevelt's policies, his administration refused to lift a finger in defense of Teddy's conservation policies in the Hells Canyon case.

The REA Also. The Rural Electrification Administration is also feeling the effect of the Eisenhower private power policy. More and more cooperatives are being denied loans to construct transmission lines from government plants or to install their own diesel or steam-generating plants. The purpose is to force the cooperatives to seek a supply from private companies, with accompanying higher costs. To cap all, as this is written, a move is on to raise the interest rate on loans from the statutory 2 percent. High interest costs would jeopardize the success of many marginal cooperatives and force higher electric rates for all.

Past—Present—Future. All realistic historians appraise the conservation movement as a radical forward step in the evolution of American democracy. No adequate appraisal of the onslaught against the movement since the Korean war can be made without understanding what has happened to the American economy since July 4, 1776.

Social and economic justice did not follow the advent of the Republic. Owners of land, natural resources, and essential public services have been permitted to do largely as they pleased with their holdings under the sanction of legal dogma. The divine right of property has replaced the ancient dogma of the divine right of kings on this side of the Atlantic.

American economic history is the story of the efforts of our less privileged citizens to better their lot in life through the 18 decades that have passed since the Declaration of Independence. Up to the turn of the century standard historians dealt chiefly with war and politics. Simultaneously with the conservation movement rose a new school of historians who began to study our past economic and social way of life. They have brought to light the reasons why change was necessary. Their tribe has increased. At no time has our civilization been under such critical scrutiny at the hands of fearless scholars, statesmen, and leaders of reform movements.

The rank and file is beginning to understand. Their understanding makes certain that the present effort to fix the status quo and revert to 19th century concepts cannot succeed. We are confronted by many grave financial, economic, educational, housing, and resource problems that are above and beyond mere party politics.

Water a National Problem. This volume is centered around the problem of water. Major floods and flash floods have increased in number and destructiveness. Lives are lost. Property damage runs into billions of dollars. The federal and state governments, the American Red Cross, and other private agencies are called on to supply millions of dollars in relief money for the stricken areas. Likewise devastating droughts are on the increase in the east as well as the west, and the nation with increasing frequency is asked to come to the rescue of "disaster areas."

Experts in the important modern science of hydrology have pooled their findings to warn us that in the not too distant future the United States will have to deal with a major shortage of water. They explain that our main dependable source in most regions is ground water, but underground water levels are dropping. This source cannot possibly meet the demand from our tremendously increased population and modern industry, which already uses approximately as much water as the total of our irrigation districts. Our only solution is to conserve water. The best way is the construction of reservoir dams to store all possible rain water that drops from the skies.*

2000 A. D. Thus far in the history of our democracy, common sense has ultimately prevailed over selfish interests, obstructionists and clingers-to-the-status-quo. Sometimes progress has been held back until a natural cataclysm like the Mississippi river flood of 1937, an economic collapse as in 1929, or a war, has forced adoption of progressive measures. But they ultimately get adopted.

The unified conservation idea symbolized by the Tennessee Valley Authority has not been duplicated in any other watershed in the United States, although 1958 was TVA's 25th anniversary year. But the old-line agencies like Army Engineers, Bureau of Reclamation, Forest Service and Department of Agriculture were all busily engaged in their limited fields attempting to create counterfeits of the basic TVA ideas which can be passed off on the public as equally good. They cannot succeed for the continuance of multiple-agency forces divides the conservation job among those agencies in bits and pieces. It prevents the effective integration of land, water, power and human development projects into a unified whole.

The Pick-Sloan plan in the Missouri Basin, which has been described as a "shotgun wedding" of Army Engineer flood control and navigation planning with Bureau of Reclamation's irrigation and power projects, is a dramatic example of the old-line agency efforts to counterfeit the TVA-type of over-all, integrated development of all the re-

sources of a great watershed. Threatened by creation of a Missouri Valley Authority patterned after TVA, the Corps of Army Engineers and the Bureau of Reclamation in one day "co-ordinated" the Army's plans for flood control and navigation dams in the Missouri Valley with the Bureau's plans for power and irrigation dams. They got the Department of Agriculture to add a soil plan several years later, but, meantime, at least two national Commissions (the Hoover Commission on Reorganization of the Executive Branch of the Government and the Truman Water Resources Policy Commission) had pointed out the phony nature of the so-called "shotgun wedding" in the Missouri Basin and recommended that there be real integration of resource development, or that more TVA-type authorities be set up.

Floods, droughts, water shortages, need for full hydroelectric power development are increasingly making themselves felt. Population growth increases pressure from another direction. It is inevitable that before our first Conservation Century ends around 2000 A.D. that application of basic TVA ideas, first enunciated by the conservationists at the turn of the century, will have blanketed our nation just as they are already spreading through the world.

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30. Proceedings of the Fourth National Conservation Congress, pp. 41, 232, 318.
31. *Ibid.*, pp. 160-162.
32. For vivid description of this affair, see Kerwin, *Federal Water Power Legislation*, pp. 161-170. Also Reports of the Committees on Water Power and Resolutions, Fifth National Conservation Congress, 1913.

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3. House Document No. 20, 63rd Congress, 2nd Session, 1914.
4. Hearings, Rivers and Harbors Committee, December 12, 1941.
5. *Congressional Record*, Vol. 51, pp. 14660, 15153-15155, 15507, 15528, (for full debate consult Index on H. R. 13811.)
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1. H. R. 112, *Congressional Record*, 1913, Vol. 50, p. 82; reintroduced August 1, 1913 as H. R. 7207, *Ibid.*, p. 3023. For general description see opening speech by Ferris, Chairman, Public Lands Committee, *ibid.*, pp. 3894-3924.
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8. *Ibid.*, appendix, p. 535.
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3. *Ibid.*, pp. 4724-4730.
4. *Hearings on S. 4971, To Authorize the Withdrawal of Water Power Sites for the Manufacture of Nitrates*, Senate Committee on Agriculture and Forestry, 64th Congress, first session 1916, p. 42.
5. *Ibid.*, p. 14.
6. *Ibid.*, p. 107 et seq.
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10. *Ibid.*, pp. 5640-5649.
11. *Ibid.*, p. 5962.
12. *Ibid.*, pp. 5650-5652.
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14. *Ibid.*, p. 5966.
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17. *Ibid.*, pp. 8027-8047.
18. *Ibid.*, p. 8046.
19. *Ibid.*, pp. 8118-8119.
20. *Ibid.*, pp. 8397-8398.
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